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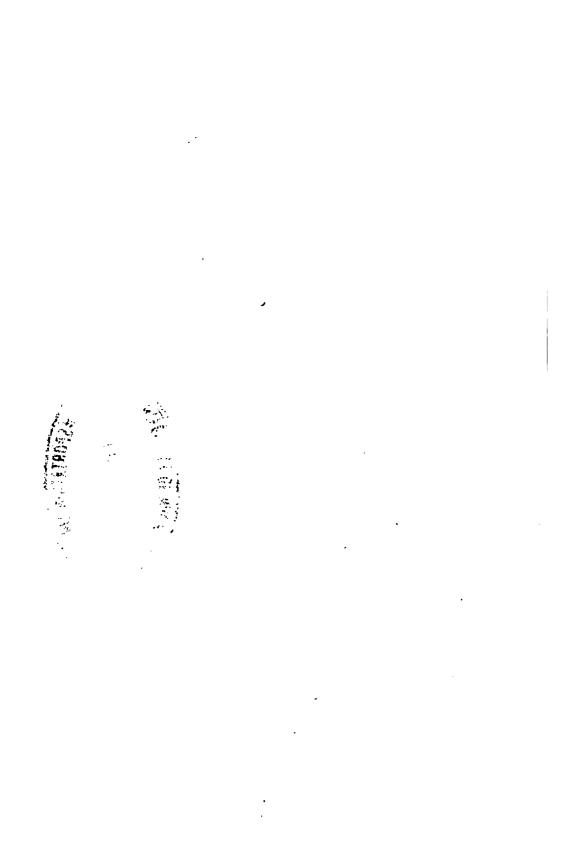


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CYCLOPÆDIA

OF

COMMERCE,

MERCANTILE LAW,
FINANCE, COMMERCIAL GEOGRAPHY,
AND NAVIGATION:

Β¥

WILLIAM WATERSTON,

MERCANTILE AGENT AND ACCOUNTANT.

Rew Edition,

CORRECTED AND IMPROVED,

WITH A SUPPLEMENT,

BY

P. L. SIMMONDS,

AUTHOR OF "A DIGTIONARY OF TRADE PRODUCTS, ETC."
EDITOR OF "DR. URE'S PHILOSOPHY OF MANUFACTURES,"
AND "HISTORY OF THE COTTON MANUFACTURE."



HENRY G. BOHN, YORK STREET, COVENT GARDEN. 1863.

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PREFACE.

WATERSTON'S CYCLOPÆDIA OF COMMERCE is in my estimation one of the most reliable, authentic, and complete of the portable works of reference at present before the public, whether regard be had to the descriptive articles of places and Trade Products, or to those on Finance, Law, Shipping, and Commerce. Various important changes have however taken place in Manufactures and Commerce, Colonization and Legislation, since the work was first published twenty years ago. Many new trade articles, such as alpaca, mohair, guano, gutta percha, vegetable wax, &c. have been introduced and risen into considerable importance, and he general commerce of the United Kingdom and other countries has vastly increased. Various important alterations have been made in the boundaries and divisions of States in Europe, Asia, and America; Emigration and Colonization have been largely extended; new and important manufacturing industries have sprung up, and old ones raised to a position scarcely dreamt of in former years. The textile manufactures alone have become gigantic in their several features of raw material, capital, machinery, and labour employed. Navigation, especially aided by steam, has been greatly extended and facilitated. The gold discoveries of California, British Columbia, and Australia, have had a great effect on Commerce and Colonization. International Exhibitions have been held from time to time in various countries, where exhibitors have competed with each other in the production of novelties and articles of excellence. These and numerous other influencing causes, and among them the extensive adoption of freetrade measures, have widely extended the range of Commerce and led to a great development of manufactures and raw products in this and other countries of Europe.

The original work was placed in my hands with the view that I should revise and bring down the information to the present time. In a stereotyped work it is often difficult to expunge and re-write the information of the several articles. A supplement therefore appeared the best mode of accomplishing the desired object, and this has accordingly been adopted for such articles

as could not conveniently be revised in the body of the book. And to connect the supplementary information as readily as possible an S has generally been inserted at the end of the original article, as an indication that additional matter will be found in the Supplement.

Among the entirely new articles, may be enumerated: Alpaca, British Columbia, California, Coal Fields, Cod Liver Oil, Costa Rica, Gutta Percha, Merchant Shipping Act, Natal, Nicaragua, Panama, Passengers' Act, Porto Rico, San Salvador, St. Domingo, Tahiti, Tasmania, Terra Japonica, Treaties of Commerce, Vancouver, Vegetable Wax, Wrecks, and Zanzibar. And among those to which important additions have been made, are: Austria, Baden, Balance of Trade, Bankruptcy, Banks, Beer, Belgium, Books, Brandy, Brazil, Bullion, Canada, Canals, Cape, Cattle Trade, China, Ceylon, Clocks, Coal, Cod, Coffee, Colony, Commerce, Copper, Corn, Cotton, and Cotton Manufactures, Currants, Customs, Docks, Earthenware, East India Company, Ecuador, Eggs, Emigration, Exports, Fisheries, Flax, France, Funds, Furs, Glass, Gold, Guano, Hamburgh, Hemp, Holland, Hops, India, Indigo, Insurance, Iron, Iron Manufactures, Ivory, Japan, Java, Lace, Leather, Linen, Lloyds, Madder, Maize, Malt, Marble, Markets, New Granada, New South Wales, Nigritia, Oysters, Patents, Pepper, Philippine Islands, Post Office, Prussia. Prusso-German Customs Union, Railways, Revenue and Expenditure, Rice, Russia, Salt, Saxony, Seals, Sheep, Shipping, Siam, Sicily, Silk Trade, Silk Manufacture, Spirits, Steam Navigation, Sugar, Tariffs, Tea, Tobacco, Turkey, United Kingdom, United States, Uruguay, Watch, West Indies (British and Foreign), Whale, Wine, Wool and Woollen Manufactures.

The statistical and descriptive information has been brought down as nearly as possible to the close of 1860, and in some instances to the present time; and no pains have been spared to ensure all possible accuracy, and completeness. I trust that the care and research bestowed will render the Cyclopædia in its present form eminently useful, and maintain for it that high character in which it has always been held.

P. L. SIMMONDS.

June, 1863.

CYCLOPÆDIA OF COMMERCE.

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ABANDONMENT, in Marine Insurance, takes place in those circumstances where the insured may claim as for a total loss. The insured may abandon when, by any of the events insured against, the voyage is lost, or is not worth pursuing,—where the subject is so damaged as to be of no value to the owner,—where the salvage is very high,—where the part saved is of less value than the freight,—or where farther expense is necessary, and the insurer will not undertake to defray it. Where abandonment is accepted by the underwriters, or a total loss paid for, a subsequent recovery will not give a right to revoke the transaction. The insured is in no case bound to abandon. In France, Spain, and Holland, the time for giving notice of abandonment is limited by law: in Britain it depends on circumstances. Where the insured receives intimation of a total loss, he must communicate his election to the underwriter without delay. He is entitled to a reasonable time for ascertaining the state of the case, but must not treat it in the first instance as a partial loss, and abandon on finding his choice disadvantageous. The underwriter, if he object to the abandonment, must give timely notice. [Insurance (Marine). Loss.] (Park, 228-282. Marshall, 563-627.)

ABBREVIATION, the contraction of a word or phrase, made either by omitting some of the letters, or by substituting certain characters in their place. Abbreviations were anciently much employed in order to save the labour of copying; and even after the invention of printing, they continued so prevalent, and in some cases

even after the invention of printing, they continued so prevalent, and in some cases became so unintelligible, that Parliament at last restrained their use in legal documents. A few of those most frequently used in commerce, and for general purposes,

are subjoined :-

A. D. the year of our Lord
A. C. the year of Christ
B. C. before Christ
A. M. the year of the World
A. H. the year of the Hegira
O. S. Old style
N. S. Now style
A. M. Forenoon
P. M. Afternoon
Xmaa. Christmas
Uit^o. the last month Ulto, the last month Inst. the present month Prox°. the next month Prox^o. the next month m/d Months after date d/s Days after sight d/d Days after date Ditto or do. the same Dr. Cr. Debtor, creditor E. E. Errors excepted I. O. U. I owe you F°. folio

No. Number Co. Company L. e. that is to say i. e. that is to say
P. S. Posterript
L. S. the place of the seal
MS. Manuscript
N. B. Observe
E. G. for the sake of example
N. R. S. W. North, east, south, west E. I. C. East India Company E. I. C. S. East India Company B. I. C. S. East Hum Company Service
N. B. North Britain
W. I. West Indies
U. S. United States
H. B. M. Her Britannic Majesty
H. M. S. Her Majesty's ship
J. P. Justice of Peace
W. S. Writer to the Signet
C. E. Civil Engineer

*/c per cent.
£ or L. Pound
8. D. Shillings and pence
F. or qt. Farthings
§ or D. Dollara
Ø Mirces
ft.c. Francs and cents
8. R. Sicca rupees
A. R. P. Acres, roods, poles
Cwt. Qr. lb. Hundredweight,
quarter, pound
Oz. dwt. gr. Ounce, pennyweight,
grain grain
Hhd. bar. pun. Hogshead, barrel, puncheon
Gal. qt. pt. Gallon, quart, pint
Qr. bu. pk. Quarter, bushel, peck
Yd. ft. in. Yard, foot, inc'i
'' Degrees, minutes, seconds
[LLOYD's.]

ACCEPTANCE OF A BILL, is an engagement on the part of the drawee to pay the bill, in full, if the acceptance is unlimited. According to the usual practice, the acceptor signs his name beneath that of the drawer. Though no condition can be appended by the drawer of a bill, it may by the acceptor, and he will not be responsible till the condition be fulfilled. The holder is not bound to take a condi-

tional acceptance, but if he do so, he will be held to have made his election. To preserve the responsibility of drawers and indorsers entire, notice of a condition to an acceptance should be immediately sent them. By 1 and 2 Geo. IV. 78, the acceptance of inland bills must be in writing on the bill. This applies to bills which are both drawn and accepted within any one of the three divisions of the empire. A similar rule applies to all bills, whether foreign or inland, in Scotland. Foreign bills in England and Ireland may be accepted verbally, or by a writing apart. A notification that the bill has "been presented" or "seen," or a statement that "it shall meet with due honour," is sufficient. By custom, the drawee is allowed twenty-four hours, or till next day, to consider whether he shall accept, unless the post leave in the interim. If acceptance be refused or delayed, a protest should be taken,—in any part of the empire in the case of a foreign bill, and in Scotland in the case of either an inland or foreign bill; and notice should immediately be transmitted to any party liable, intimating the non-acceptance must be made by signature on the bill to give it the legal privileges, an action against the drawee may be grounded on a separate engagement to accept, especially if a third party has advanced money on it; and if the drawee has funds of the drawer in his hands, presentment and protest for non-acceptance with notice, will operate as an assignational acceptance, but if he do so, he will be held to have made his election. To presentment and protest for non-acceptance with notice, will operate as an assignation of them. [Assignment.] Acceptance cannot be withdrawn after the bill is returned to the holder.

A bill may be accepted by procuration, but the holder is not bound to take such acceptance, unless a clear and express authority from the principal be prosuch acceptance, unless a clear and express authority from the principal be produced. Acceptance is held a recognition of the drawer's signature, so as to preclude the acceptor from pleading against an onerous holder that it is forged; but it is not held an admission of an indorser's signature, though the acceptor must be considered bound to notice any condition attached to an indorsement. In England, a collateral undertaking may be constituted by a second acceptance that is an approximate the constituted by a second secondary. a collateral undertaking may be constituted by a second acceptance, that is, an engagement to pay the bill if it is not honoured by the first acceptor. In Scotland, a gagement to pay the bill if it is not honoured by the first acceptor. In Scotland, a second acceptor is primarily liable with the first, and thus one who signs a bill with a view of being a cautioner merely, will be liable as a principal acceptor. The payee, by accepting, transfers the debt from the drawer's shoulders to his own: he is thenceforth considered the party liable; and after the bill is in circulation, when it is paid, it is presumed to be with the acceptor's funds. Although the bill were not drawn for value, the acceptor is presumed to have had value for it, and he can only redargue the presumption by evidence, which in Scotland must be written, unless it be admitted by the party on eath that there was no value.

**Acceptance for Honour or Supra Protest is an engagement to pay the bill if not

it be admitted by the party on oath that there was no value.

Acceptance for Honour or Supra Protest is an engagement to pay the bill if not paid by the drawee, entered on after it is protested against the latter for non-acceptance. It is performed by a party who professes to be under no obligation to accept, and for the purpose of preventing the bill from being returned dishonoured. It may be by a third party, in the absence of, or on the refusal of the drawee, or t may be by the drawee himself, who refuses to accept the draft of the drawer, but accepts for the honour of an indorser. The drawee may even refuse to accept the bill absolutely, and may then, after protest, accept for honour of the drawer. The acceptor for honour only renders himself liable in a recourse, in case of non-payment by the proper party, and so the bill should be presented to the drawer. The acceptor for honour only renders himself liable in a recourse, in case of non-payment by the proper party, and so the bill should be presented to the drawee for payment when it falls due, notwithstanding his refusal to accept it. The acceptor for honour has recourse against the person for whose honour he has accepted, and succeeds to whatever claim that person may have against the drawee. (Bayley on Bills, 171-215. Chitty on Bills, 307-383. Thomson on Bills, 329-368.) [ACCOMMODATION BILL. BILL. NOTICE. PRESENTMENT. PROTEST.]

ACCOMMODATION, a significant term applied by merchants to the credit fabricated by means of a bill of exchange, drawn solely for the purpose of being discounted, and not sanctioned by an actual sale of goods. Such a bill is called an accommodation bill, also a wind bill, a kite, or a fictitious bill. Accommodation bills are of various kinds. The following description of one may suffice:—A being in want of £100. requests B to accept a bill drawn at two months, which B there-

want of £100, requests B to accept a bill drawn at two months, which B therefore, on the face of it, is bound to pay; it is understood, however, that A will take care either to discharge the bill himself, or to furnish B with the means of paying it. A obtains ready money for the bill on the joint credit of the two parties. A fulfils his promise of paying it when due, and thus concludes the transaction. In general, accommodation bill transactions are carried on for the joint benefit of the parties, by means of cross acceptances, or bills mutually drawn, accepted and exchanged; and where two names are not enough, others are obtained sufficient to

give currency to the bills. The payment of these bills is, among needy men, provided for by their again reciprocally drawing upon each other; and this is repeated until the system of expedients failing, bankruptcy sconer or later overtakes the principal parties, and, not unfrequently, all who are brought within the circle of their operations. The loss of credit which the use of accommodation paper, when once perceived, generally occasions,—the expense of stamps, and higher rates of discount, and particularly the double liability for the sums for which cross acceptances are given, should deter the respectable merchant from having recourse to this dangerous expedient. But it must be admitted, at the same time, that where, from some unexpected event, or commercial revulsion, a merchant is unable to bring his commodities to a fair market so as to meet his payments, his credit may be saved commodities to a fair market so as to meet his payments, his credit may be saved by the temporary assistance of friends, through the medium of bills, and he may be enabled to hold his goods till some proper opportunity of sale presents itself; and (although such contingencies cannot be too anxiously guarded against) there are perhaps few who have transacted business long and extensively, who have not, at particular times, received support in this way.

(although such contingencies cannot be too anxiously guarded against) there are porhaps few who have transacted business long and extensively, who have not, at particular times, received support in this way.

It is sometimes said that real bills represent real capital, while accommodation bills are a species of false and delusive wealth, which suppy only an imaginary capital; but this supportion, Mr Thornton remarks, is "one by which more than justice is done to one of these species of bills, and something less than justice to the other." "The notes given in consequence of a real sale of goods cannot be considered as on that account certainly representing any actual property. Suppose that A sels £100 worth of goods to B at six months 'credit, and takes a bill at six months for it; and that B, within a month after, sells the same goods at a like credit to C, taking a like bill, and again that C, after another month, sells them to D, taking a like bill, and so on; there may then, at the end of six months, be six bills of £100 each existing at the same time; and every one of these may possibly have been discounted. Of all these bills, then, one only represents any actual property." "In order to justil the supposition that a real bill (as it is called) represents actual property, there ought to be some power in the bill-holder to prevent the property which the bill represents from being turned to other purposes than that of paying the bill in question. No such power exist; netther the man who holds the real bill, nor the man with the prevent albility to pay of the gives of the bill as the holder of any fictitious bill does. The fictitious bill may be said, in that case, to represent."

"We come next to some points in which they differ. First, the fictitious bill may be said, in that case, to represent."

"We come next to some points in which they differ. First, the fictitious bill sit a which are passed as real. In many cases, it is sufficiently obvious what they are. Secondly, The fictitious bill is in general les

form of ordinary bills: their legal effect, however, is different as respects parties between whom they do not represent a real debt. The drawer is generally the person accommodated, the acceptor not being indebted to him, but merely putting his name on the bill, to give it currency in the market ;—if he have to retire it, therefore, the drawer becomes his creditor. That the paper is merely an accommodat'on bill, as between any two parties who appear on it, cannot, however, be a defence against a third who has given value for it, and even though he knew it to be an accommodation bill when he took it, he has the ordinary means of obtaining payment. A person who appears as debtor on a bill or note, is always presumed to have had value, and in a question with the immediate creditor, he must prove want of value by evidence; in Scotland, the evidence must be writ or oath. In a purely accommodation bill, the drawer is not entitled to notice of dishonour, the use of notice being to enable the drawer to take precautions for his safety and indemnification, if he has funds in the draweo's hands; but it can never be safe to omit notice, for if the drawer had at any time, from the period of drawing to that of acceptance, funds in the drawee's hands, he is entitled to notice. [BILL. ACCEPTANCE. NOTICE.]

ANCE. NOTICE.]
ACCOUNT, a term applied generally to a computation, reckoning, or statement

ACCOUNT-CURRENT is a statement of the transactions betwirt two parties, drawn out chronologically in a plain circum-tantial manner, and disposed in the form of debtor and creditor on

ACCOUNT-CURRENT is a statement or the transactions netwart was parties, many disposed in a plain circumstantial manner, and disposed in the form of debtor and creditor on opposite pages.

ACCOUNT OF BALER is a document giving a detailed statement of the sale of goods. It exhibits the quantities and values of the goods sold, the attendant charges, and the net proceeds.

ACCOUNT OF CHARGE AND DISCRARGE is more respects resembles an account-current, but differs considerably in form, as instead of charging the several sums at the time type are received, the whole articles with which the party is intrusted are charged at once on one side, while the other side, or discharge, shows the manner in which his has accounted for the same. "The system of accounting by charge and discharge is the old exchequer practice, a remnant of the times when the only accounting parties were debtors to the king, or stewards and balliffs to their lords; and the system is applicable only to accounts of a similar nature; such as debtors to their creditors, agents to their principals, trustees to their creati que trusts, or the like; in all which, one party only is the accountant, and the other a creditor." (Cory on Accounts.)

Merchants usually prefix the initials E. E. (for Errors Excepted) to their signature to accounts; but the omission of these letters forms no bar to the subsequent correction of errors.

Cross accounts, when of long standing and complicated, are fruitful sources of disputes. In England, such disputes are either referred to arbitration, or made the subject of a bill in Chancery, which used to be settled by masters, but since 1832, transferred to the equity judges and assisted by eatra clerks. In Scotland, where there is no establishment of particiar persons for the purpose of settling disputed accounts, the business is in general left to the ordinary courts, by whom (or by the parties, subject to their approval) a person is selected from the practising accountants to investigate and report upon the details. [Boox-Exeria

by whom (or by the parties, subject to their approval) a person is selected from the practising accountants to investigate and report upon the details [Boox-Resping. Box-Despi]

ACETIC ACID, formerly called radical vinegar, is the sour part of vinegar, and that to which its peculiar and valuable properties are owing. It is obtained, let, By the fermentation of saccharine matter. 2dly, By the distillation of wood. The product of the former constitutes, when diluted, the common vinegar, which abroad is made from wine, and in this country from an infusion of malt, termed wort. Revenue proof vinegar, termed by the maker No. 24, is calculated to contain 5 per cent. of pure acetic acid. Sp. gr. 1 0085. The acetic acid from wood is obtained by the destructive distillation of the dried branches of trees in hollow iron cylinders. The hard woods, such as oak, ash, birch, and beech, are alone used; and the average product of crude acid from 8 cwts. of wood is 35 gallons. This acid, formerly called pyroliquesus acid, is now largely employed, when purified, for almost all the purposes to which acetic acid or common vinegar is applied. Acetic acid, when pure, is fluid (except at a low temperature, when it crystallizes), volatile, and colourless, of an exceedingly pungent smell, and very acid tasto. In this state it is used in chemical investigations. In a less pure state, it is employed for preparing acetate or sugar of lead, acetate of copper or verdigris, and acetate of alumina, largely used by calico-printers and dyers as a mordant. In the form of pyroligneous acid it is employed to preserve meat, and in the state of vinegar it is applied to a variety of purposes too well known to require notice. (Brande's Chemistry, &c.) Acetic acid is frequently contaminated with sulphuric acid, which, however, is readily detected by the addition of the acetate or sugar of lead, when an insoluble sulphate is precipitated should any sulphuric acid be present. [Vinegaa.]

ACIDS, a most important class of chemical compounds. According to D

single acidifying principle, nor absolute criterion of power among the different varieties. Acids are derived from all the kingdoms of nature, and except in the few particulars above named, they vary greatly in their properties. Some are gaseous in form, others are fluid or solid. Most of them are colourless; some are inodorous; while others are pungent. The most important, in a commercial point of view, are the Acetic, Benzoic, Boracic, Citric, Gallic, Muriatic, Nitric, Nitro-muriatic, Nitrous, Oxalic, Prussic, Sulphuric, Sulphurous, and Tartaric; an account of which will be found under these several heads.

ACKER WOOD, a fancy wood of a cinnamon colour.

ACORUS, or SWEET FLAG, a medicinal plant (Calamus aromaticus), found in moist situations in many parts of Europe and Asia. It was formerly imported from the Levant, but is now obtained equally good from marshes near Norwich. It is slightly aromatic, and is occasionally used as a stimulant. The part employed is the dried creeping stem, improperly termed root, which should be chosen tough, cleared from fibres, and free from worms—to which it is very subject.

ACQUITTANCE. [RECEIPT.]
ACRE, a measure of land. The imperial standard acre contains 4 roods, 160 square perches, 4840 square yards, or 10 square chains; and 640 acres make 1 square mile. I Scots acre = 1°2612 imp. acre; or 134 Scots acres = 169 imp. acres nearly. 30½ Irish acres = 49 imp. acres. 1 imp. acre = '4047 French hectare; or

nearly. 30½ Irish scres = 49 imp. scres. 1 imp. scre = '4047 French hectare; or 42 acres = 17 hectares nearly.

ACTS OF BANKRUPTCY, in the law of England and Ireland, are those acts or events which the law takes as a criterion that a tradesman is bankrupt.

"Acts of bankruptcy," says Lord Henley, "may be divided into two classes: 1st, Those acts which, being in themselves indifferent or equivocal, derive their character from the intent with which they are done; and, 2d, Those which are in themselves substantive acts of bankruptcy, and where the intent is perfectly immaterial" (17). Those of the first class are ranged in the bankrupts' act (12 & 13 Vict. c. 106) as follows: 1st, "If any such trader shall depart this realm, or, 2d, being out of this realm, shall remain abroad." The departure, or remaining abroad, must be with the intent of delaying creditors, and, if the intent is not shewn, the fact that they have been delayed is immaterial. "As where one goes abroad to avoid a criminal process, or a writ de excommunicato capiendo: or a process to enforce a duty, as a decree to execute a conveyance: or if he goes abroad with the knowledge and consent of his creditors" (Henley's B. L. 17). "In some cases where the trader has gone abroad, under circumstances which render it highly improbable that he would return to this country, ex gr. where he had committed murder, it will be inferred that he must have intended to delay his creditors, such being the necessary consequence of his behaviour" (Smith's Mercantile L. 472). The alternative act of remaining abroad was inserted in the last statute to prevent one who had gone abroad with different views, from remaining absent, on hearing that his affairs were embarrassed, without being liable to the consequence of having committed an act of bankruptcy; 3d, "or depart from his dwelling-house." Here, as in the former case, bankruptcy; 3d, "or depart from his dwelling-house." Here, as in the former case, the intent to delay is the material circumstance, and where a creditor left his house, though under a false apprehension that officers who called had authority to arrest him, when they had not, it was an act of bankruptcy (Exp. Bamford, 1808; 15 Vessy, 449); 4th, "or otherwise absent himself." This embraces most of those at-Vesey, 449); 4th, "or otherwise absent himself." This embraces most of those attempts to keep out of the way of a creditor, which do not come within the previous more narrow definitions. The intent to delay is necessary. The absenting does not require to be from the dwelling-house, or even the principal place of business. "A trader," says Mr Smith, "may commit an act of bankruptoy, by absenting himself from his own regular place of business, in which a man would be expected to be, or from some other place where he expected to meet those to whom he was indebted; for instance, the Royal Exchange, in order to delay his creditors. But the mere fact of a trader's absenting himself from a place at which, though he had once transacted business there, it did not appear that he had any business to transact at the time of his staying away from it, and at which, therefore, he would not, in the ordinary course of things, be expected to be present, will not warrant a jury in concluding that he had committed an act of bankruptey, by absenting himself, in order to delay creditors. But no case, it is said, has yet gone the length of deciding that where the appointment was to meet a creditor at his, the creditor's, and the debtor breaks that appointment, such conduct amounts to an act of bankruptcy" (478).

debtor breaks that appointment, such conduct amounts to an act of bankruptcy" (473).

5th, "Or begin to keep his house," that is, if he begin to seclude himself, so as to prevent his creditors from communicating with him, as, by retiring from his shop to his parlour, or by closing the doors and windows of his place of

business. Formerly the only admitted evidence of keeping house, was proof of directions to deny access to a creditor, and of access denied accordingly. The seclusion may now, however, be shown by other unequivocal facts, and it is not necessary when a direction to deny access is proved, to prove that it was obeyed. Where the conduct of the individual is, however, otherwise equivocal, evidence of denial will be required. Where a trader bade his servant tell any creditor who might call that he was not at home, and on a creditor calling he was so told, though the debtor was at home and ill, and might have validly excused himself on that ground, it was laid down that a jury might find it to be an act of bankruptcy (Lazarus v. Waithman, 1821; 5 Moore 313). On the other hand, if a creditor is simply denied access, the circumstance may be explained away on the ground of illness or engagement. "A mere direction by a trader to deny him to a creditor, if he do no further act indicative of keeping house, such, for instance, as secluding himself, is not, per se, an act of bankruptcy: neither, on the other hand, is a denial, if he did not order it" (Smith's Mercantile L. 475). A denial in a Friend's house, or on board a ship, may be an act of bankruptcy. A denial on a Sunday was held not to be so, though that day had been agreed on between the is a denial, if he did not order it? (Smith's Mercantile L. 475). A denial in a friend's house, or on board a ship, may be an act of bankruptcy. A denial on a Sunday was held not to be so, though that day had been agreed on between the debtor and creditor for settling the account (Exp. Preston, 1813; 2 V. and B. 311). 6th, "Or suffer himself to be arrested for any debt not due;" 7th, "or yield himself to prison;" 8th, "or suffer himself to be outlawded;" 9th, "or procure himself to be arrested;" 10th, "or his goods, money, or chattels, to be attached, sequestered, or taken in execution;" 11th, "or make, or cause to be made, stitus within this realm or sleawhere any frauduent grant or conveyance of any either within this realm or elsewhere, any fraudulent grant or conveyance of any of his lands, tenements, goods, or chattels, or make or cause to be made any fraudulent surrender of any of his copyhold lands or tenements, or make or cause to be made any fraudulent gift, dolivery, or transfer, of any of his goods or chattels." Deeds of the description here enumerated are divided into two kinds: 1st, "those which are void at common law, or under the statute of fraudulent conveyances, 13 Elizabeth, c. 5; and 2d, those which are considered fraudulent, as being in contravention of the policy of the bankrupt law, either by adopting a mode of distribution of the insolvent's property, different from that which the bankrupt law points out, or (which will embrace the consideration of the second of the above acts of bankruptcy) by being a preference of one or more creditors in fraud of the others" (Henley's B. L. 26). Those of the former kind are frauds in their own nature. The other class consists Those of the former kind are frauds in their own nature. nose of the former kind are frauds in their own nature. The other class consists of acts, which, were they not performed by a trader, would not be held as frauds. These are, lst, an assignment or disposal of the whole of the trader's property. Although the rule contemplated the defrauding of creditors by such an act, yet it is not the less an act of bankruptcy, though made in favour of the creditors themselves as a body. But the advantages of deeds of composition having been experienced for some time in Scotland, the rule was restricted by 6 Geo. IV. c. 16, § 4, which enacts, that a trust-deed for the benefit of all the creditors of a trader, shall not be considered an act of bankruptcy unless a commission or fat issue within all most be considered an act of bankruptcy, unless a commission or flat issue within six months. [Composition Contract.] A creditor who has executed or been privy to, or has acted under, a general conveyance to creditors, caunot afterwards challenge it as an act of bankruptey. The character of the act, it has been held, is not saved by the circumstance that the deed is only to be executed on certain conditions, as, if the trustees think fit, or if a commission of bankruptcy do not issue within a certain time. An exception of a very small portion of his property will not save a general disposal of a trader's effects from being an act of bankruptcy. The second kind of disposal contrary to the spirit of the bankrupt laws is one giving an unfair preference to any particular creditor. A merchant in solvent circumstances is always entitled to follow his own choice in the routine in which he may pay his creditors, and therefore it is only when it is done in contemplation of bankruptcy, and with the view of making an unequal distribution of the estate which is to become bankrupt, that such a preference constitutes an act of bankruptcy. It does not appear that the act will be one of bankruptcy however closely bankruptcy follow it, unless it was contemplated. Thus, where one purchased goods on October 8, for exportation, but finding that he must stop payment, and could not make use of the goods, returned them on October 16, and stopped payment next day, but expected, that, as he had to receive remittances from abroad which would enable him to pay in full, his creditors would give him time, but they refusing, he was made bankrupt on November 2; this was held think fit, or if a commission of bankruptcy do not issue within a certain time. him time, but they refusing, he was made bankrupt on November 2; this was held not to be an act of bankruptcy (Fidgeon v. Sharp, 10th May 1814, 1 Marsh. 196). To constitute an act of bankruptcy, the assignment must be voluntary. "Therefore a payment or delivery under the threat or apprehension (however unfounded) either of a criminal or civil process is valid: or where the trader acts from the mere

importunity of the creditor, or, as in Smith v. Payne (6 T. R. 152), where the

creditor knowing it was in vain to ask for money, pressed the trader to let him have goods to the amount of his debt" (Henley's B. L. 33).

The following are the acts of bankruptcy which possess that character independently of the intention of the bankrupt: 1st, Where a trader arrested for debt, or on any attachment for non-payment of money, lies in prison twenty-one days on that or any other similar commitment, or having been arrested for any other cause lies for twenty-one days in prison after a detainer of debt is lodged against him and not discharged (12 & 13 Vict. c. 106, § 69). "The debt must be a real subsisting legal debt; a mere equitable demand is not sufficient; a penalty due to the crown is (Smith's Mercantile L. 486). The day of arrest is included in computing the period which is not considered as completed until the expiry of the last of the twenty-one. In case of bail, the time is computed from the date of surrender in discharge of it, "unless the surrender were merely proforma, the defendant never having been out of custody since the arrest, in which case the time runs from the arrest, as it will, if he have, in consequence of sickness, been kept part of the time at his own house, or have had the benefit of day rules during the period. But where he had been suffered to had the benefit of day rules curring the period. Dut where he had been subserve we go at large after the arrest, the time was computed from his return into custody" (1b. 486). 2d, Escaping from an imprisonment of the above character. The escape must not be constructive, but real. 3d, A trader may voluntarily become bankrupt by filing in the secretary of bankrupts' office a declaration of insolvency, attested by an attorney or solicitor. A memorandum issued from the office then becomes a warrant for advertising the bankruptcy in the Gazette. No flat, however, can issue on the act beyond two calendar months after insertion of the advertisement, or if the advertisement have not been inserted within eight days after the filing of or if the advertisement have not been inserted within eight days after the filing of the declaration (12 & 13 Vict. c. 106, § 69). By the immediately following section it is enacted, "That no commission [Fiat] under which the adjudication shall be grounded on the act of bankruptcy, being the filing of such declaration, shall be deemed invalid by reason of such declaration having been concerted or agreed upon between the bankrupt and any creditor or other person." 4th, Compounding with the petitioning creditor, i.e. paying to the person who struck the docket, or enabling him to obtain a larger proportion of dividend than the other credi-

The favoured creditor forfeits his debt, and must refund. By the act for partially abolishing imprisonment for debt, and for the relief of insolvent debtors (1 & 2 Vict. c. 110), the filing of a potition for discharge, under the act by a person in actual custody, is an act of bankruptcy from the date at which he took that step, and if a fast be taken out before the time appointed by the court and advertised for the hearing of the petition, or if it be taken out within two months after the date at which the order to that effect was issued by the court, the provisional assignee in terms of the act is divested, but not otherwise (§ 39). By the same statute, it is an act of bankruptcy, if a creditor or creditors, to the amount requisite to authorize a petition for bankruptcy, having filed affidavits of their debts in the court of bankruptcy, the debtor do not pay them, or find security within twenty-one days (8 8)

within twenty-one days (§ 8).

Act of Bankruptcy by a Member of Parliament.—By 12 & 13 Vict. c. 106, § 9. If a member of parliament who is a trader commit any of the acts which are acts of bankruptcy in the case of ordinary traders, a commission may issue in the usual of bankruptcy in the case of ordinary traders, a commission may issue in the usual manner, but the member is not liable to arrest. By § 66, a creditor or creditors of the legal amount [Bankruprcy] may file affidavit of the debt in any of the courts at Westminster, and sue out a summons, with a copy of which the member of parliament may be served; and if he do not satisfy the creditor by payment or compounding, or enter into a bond with two sureties to pay any sum that may be recovered against him with costs, and enter appearance to the action within one calendar month after service of the summons, an act of bankruptcy is committed by him. By § 11, if a trading member of parliament disobey any order to pay money in the course of an action in a court of equity, the creditor may apply to the court to fix a peremptory day for the payment, and if the debtor, being served with the order eight days before the day appointed for payment, neglect to pay, he is to be held as having committed an act of bankruptcy from the time of service.

In Irreland by the bankrupt statute 6 Wm. IV. c. 14, § 19-27, the acts of bankruptcy of previous English statutes were enacted there, with this addition to the act then in force, that the words "situate in England or Ireland or elsewhere"

act then in force, that the words "situate in England or Ireland or elsewhere' follow the words "or make or cause to be made any fraudulent surrender of any of his copyhold lands or tenements." [Assignees. Bankruptcy. Commissioners.]

ADAMANTINE SPAR, or COMMON CORUNDUM STONE, is, with the exception of diamond, the hardest substance known. Sp. gr. 4. It contains about 90 per cent. of alumine, with a little iron and silica, and is generally of a pale gray or greenish colour, but sometimes of red and brown tints. It is found in India, China, and in some parts of Europe. The Indian variety is considerably whiter than the Chinese, and is usually deemed the purest. In the East it is used for polishing steel and outting gems, but the European lapidaries prefer diamond powder. ADEN, a seaport of Arabia, lying in 12° 52′ N., 44° 59′ E. about 100 miles E. of the entrance to the Red Sea. It was acquired by the East India Company in the year 1838, partly to facilitate the steam-navigation of that sea. The town is advantageously situated upon a noble promontory, which forms two bays, in the

is advantageously situated upon a noble promontory, which forms two bays, in the westernmost of which, or "Back Bay," a place has been selected for the formation of a coal depôt. This bay is accessible and sheltered, and at low water is nearly twenty feet in depth, within about thirty yards from the shore.

twenty feet in depth, within about thirty yards from the shore.

Aden was formerly the most opulent city in Arabia; and during the twelfth, thirteenth, and fourteenth centuries, was as important emporium in the European trade with India. It afterwards declined; and latterly, the town and its once imposing fortifications have been nearly a heap of ruins, inhabited by a miserable population of 600, composed of Jews, Banians, Arabs, and Bamalkies. Under the protection of the Company, however, there can be little doubt that it will again acquire much of its former consideration. Its local position and harbour give its decided advantage over the ports of the Red Sea, by enabling vessels to perform several trips to and from India daving the year; whereas the nature of the winds within the Straits of Babe il Mandeb are such, that more than one can seldom, if ever, be effected by a native vessel. The monopolising spirit of the Egyptian government, at present, operates unfavourably upon British commerce with the countries adjoining the Red Sea; but it is considered likely, notwithading, that the rich products of Abyasinia, and of the neighbouring parts of Africa, consisting of gold-dust, ivory, coffee, guma, frankincense, hides, and sheep, will soon find their way to Aden, to form a return for the silks, cotton piece-goods, iron, and rice, which will be imported from Britain and India. To facilitate the sale of British and Indian goods throughout Arabia, it fortunately happens that the road leading to the interior is the nearest to the richest part of Yesnen, and from which the celebrated coffee can be more easily conveyed to Aden than to Mocha. At present, it is the chief mart for the gums brought from Africa by the Bomaules.

ADJUSTMENT, in Marine Insurance, a calculation of the sums to which the insured is entitled from the respective underwriters, on a loss occasioned by any of msured is enuited from the respective underwriters, on a loss occasioned by any of the risks insured against, generally prepared by a professional person, indorsed on the policy, and signed by the several underwriters. It is compared to a note of hand, being presumptive against them, and not requiring the consideration to be proved by the holder, but admitting of a valid defence being raised and proved by the underwriter. [INSURANCE (Marine). Loss. POLICY.]

ADMEASUREM (Lat) according to the value. This term is not a loss of the value.

AD VALOREM (Lat.), according to the value. This term is used in commerce chiefly in reference to those duties (hence called ad valorem duties), which are

ADVANCE commonly denotes money paid on the security of property consigned or deposited. Merchants frequently advance from one-half to two-thirds of the value of goods consigned to them on receiving invoice, bill of lading, &c. [Bill.

PRINCIPAL AND AGENT. SALE. PROOF IN BANKEUPTCY, &c.]
ADVENTURE, a term sometimes used to express a shipment by a merchant on his own account. A joint adventure is where the shipment is made by two or more

parties on joint account. [JOINT ADVENTURE.]

ADVERTISEMENTS in sny newspaper, periodical or literary work, were each subject to a stamp-duty of 1s. 6d., when printed and published in Great Britain; and of 1s. in Ireland. 3 & 4 Wm. IV. c. 23 (June 28, 1833). The revenue derived from advertisements amounted in 1839 to £125,026; of which, England, £101,357; Scotland, £13,928; Ireland, £9741.

By 6 & 7 Wm. IV. c. 66, a penalty of £50 is imposed on persons advertising foreign or other illegal lotteries, but by an Act of 1853 (16 & 17 Vict. c. 63) such duties are abolished. By § 8, a stamp duty of one penny is charged on scrip certificates. By another Act of last secsion, the 16 & 17 Vict. c. 33, no person, within the limits of the police district of London is allowed to carry about on any carriage, or on horseback, or on foot, in any thoroughfare or public place to the obstruction or annoyance of the inhabitants or passengers, any picture, placard, notice or advertisement, whether written, printed or painted upon or pasted or attached to any part of such carriage, or any board or otherwise. Penalty, 40s, or one month's imprisonment.

ADVICE, in commercial language, means information communicated by letter. The term is used chiefly in reference to bills of exchange.

"Bills are sometimes made payable 'as per advice;' at other times, 'without further advice,' (Poth. pl. 36, 169); and generally without any of these words. In the former case the drawes may not, but in the latter he may, pay before he has received advice." (Chitty on Bills.) [Notice.]

ADULTERATION is the deceitful mixture with any commodity of substances

of a different or baser nature. Adulteration is a fraud at common law. There are, however, statutes which afford a remedy in the greater number of cases; and it is

however, statutes which afford a remedy in the greater number of cases; and it is most expedient to proceed under these, more especially when they vest a summary jurisdiction in justices of the peace or other subordinate authorities. A full account of the statutes will be found in "Burn's Justice of the Peace."

AFFIDAVIT, a statement of the truth of a fact, given on oath, for which, since the passing of 5 & 6 Wm. IV. c. 62, declarations have been in several instances substituted. An affldavit must be made before some one who has authority to take it. When in reference to a suit in court, it ought to be made before the court in which the cause lies, or a commissioner authorized by it, and so an affldavit before a Master in Chancery will not be effectual in the Queen's Bench, and vice versa. Affldavits are generally used to certify the service of process, or some other procedure in a court of justice, or in support of motions, or in opposition to them. The first step preparatory to an adjudication of bankruptcy, is for the petitioning creditor to make afflavit of the amount of the debt, and of his belief that the debtor has become bankrupt; and affidavits are otherwise extensively employed, in the bankrupt codes of the rupt; and affidavits are otherwise extensively employed, in the bankrupt codes of the three kingdoms. By 5 & 6 Wm. IV. c. 62, § 13, it is unlawful "for any justice of peace, or other person, to administer, or cause, or allow to be administered, or or peace, or oner person, to administer, or cause, or allow to be administered, or to receive, or cause, or cause or allow to be received, any oath, affidavit, or solemn affirmation, touching any matter or thing whereof such justice, or other person, hath not jurisdiction or cognisance, by some statute in force at the time being." The illegality is not to apply to oaths, connected with the preservation of the peace and the punishment of delinquents, or with proceedings before parliament, or with the requisites for the validity of deeds to be used in foreign countries. By § 2 of the statute just quoted, various public officers are enumerated, in the business of which declarations may, by anthority of the Treasury be substituted for cathe and efficiency. stions may, by authority of the Treasury, be substituted for oaths and affidavits. By \$11, a declaration is substituted for an oath in taking out a patent.

Affidavits are not indigenous to the law of Sociland, and hence voluntary affidavits before judges are not evidence unless appointed by the bankrupt and other statutes.

Form of Deposition to prove a debt in an English Bankruptcy.

At the Court of Bankruptcy,

At the Court of Bankruptcy,

At the Court of Bankruptcy,

A B being sworn and examined, the day and year, and at the place above mentioned, upon his cath saith, that C D, the person against whom this prosecution of bankruptcy is awarded and issued, was at and before the date and suing forth of the same, and still is justly and truly indebted unto this deponent [and E F, his partner], in the sum of £100 [in scorits], for goods sold and delivered, for which said sum of £100, or any part thereof, he, this deponent, hath not [nor hath his said partner], nor any other person, to his [their] use, to his knowledge or belief, received any security or satisfaction whateover.

Form of Affidavit to the various of the contraction of the same and the same and

A B.

A B.

Form of Affidavit to the verity of a claim under a Sequestration in Scotland.

At Edinburgh, the third day of January, eighteen hundred and forty years.

In presence of A, one of her Majesty's Justices of the Peace for the city of Edinburgh, appeared B [or "B, one of the partners of B & Co." as the case may be], who being solemnly sworn, depones, that C is justly indebted, and resting owing, to him [or "to the company of which the deponent is a partner"], the sum of £100 [in words], according to the account hereto annexed. Depones that no part of the said sum is paid or compensated, nor does the deponent, or any of the partners of the said company"] hold any other person than the said C bound for the debt, or any security for the same, or any part thereof [except as stated in said account, or as the case may be]. All which is truth, as the deponent shall answer to God.

B

A. J. P.

AFFIRMATION is the solemn asseveration made by Quakers and Moravians in AFFIRMATION is the solemn asseveration made by Quakers and Moravians in cases where an oath is required from others. The form prescribed is as follows:—
"I, A B, do solemnly, sincerely, and truly declare and affirm." This privilege was first allowed by the act 7 & 8 Wm. III. c. 34; but it was confined to civil cases until the year 1828 when (9 Geo. IV. c. 32) it was extended to criminal cases. A false affirmation subjects the offender to all the penalties of perjury. By 3 & 4 Wm. IV. c. 82, the privilege was extended to the denomination called Separatists, and by 1 & 2 Vict. c. 77, to all persons who have been Quakers or Moravians, and who retain conscientious objections to caths.

AFFIREIGHTMENT in the law of shipping, is the contract by which a vessel.

who retain conscientious objections to cashs.

AFFREIGHTMENT, in the law of shipping, is the contract by which a vessel, or the use of it, or the use of some part of it, is let out on hire. The contract is of two kinds, charter-party and general ship, or ship on general freight. The contract does not require to be in writing, but if it be so it must be duly stamped. The obligations generally expressed, and always understood, on the part of the shipmaster, are, that the vessel must be seaworthy, provided with all necessaries, and in every way fit for the voyage undertaken. The crew also must be sufficient in number and ability. Where such is the usage, he must have a pilot on board. The

vessel must be at the port ready to receive goods, for a reasonable period, and must sail at the appointed time, weather and tide permitting. She must be properly navigated, and also directed to her port of destination by the usual and approved course. If she deviate unnecessarily, the master and owners are responsible if loss be occasioned, though it should be by the act of God or the king's enemies. The master must not incur risk by sailing with contraband goods on board, or without the proper papers. He must use every effort to convey the cargo in asfety. Where he cannot proceed in his own ship, he must forthwith adopt such means as may be best suited to preserve the safety and value of all the property committed to his charge. "Transshipment," "for the place of destination, if it be practicable, is the first object, because that is in furtherance of the original purpose; if that be impracticable, return or a safe deposit may be expecient. The merchant should be consulted if possible. A sale is the last thing the master should think of, because it can be only justified by that necessity which supersedes all human laws. If he sell without necessity, his owners, as well as himself, will be answerable to the merchant; and they will be equally answerable if he place the goods at the disposal of a Vice-Admiratly Court in a British colony, and they are sold under an order of the court, such court having no authority to order a sale. And the persons who buy under such circumstances will not acquire a title as against the merchant, but must answer to him for the value of the goods." (Abbot, 243, 244.) On his arrival the master must report his ship and crew, exhibit his manifest, and deliver the cargo to the consignee [Bill. OF LADING] on payment of charges. [Fraigner.]

The obligation on the part of the freighter or merchant, is to furnish a sufficient cargo—if he have covenanted for a full one, he must provide it though it exceed what was specified as the burthen of the ship, becoming liable in compensation for any

upon the oak, however, is most esteemed.

AGATE (Ger. Achat), popularly called Scotch pebble, is a well-known stone used in jewellery and in the arts. It is one of the modifications of form under which silica is found in almost a state of purity. The silicoous particles are not arranged so as to produce the transparency of rock crystal, but a translucent, sometimes almost opaque substance, with a resinous or waxy fracture; and a variety of shades of colour are produced by a minute quantity of iron, for the beauty of which, together with the high polish they are capable of receiving, scates are highly prized as ornaments. Agates are usually met with in that variety of the trap rocks called amygdaloid or mandelstein; they are also found as loose pebbles in the beds of rivers or in gravel, but in these cases they have been derived from the disintegrarivers or in gravel, but in these cases they have been derived from the disintegration of amygdaloids. They vary in size from that of a pin head to a foot in diameter, but those of one, two, or three inches are the most common. They are found in the river Achates, now the Drillo, in Sicily, whence it is said they derive their name; but the principal supply is procured from Oberstein, in Germany. They also occur in many parts of Scotland, especially in the Isle of Skye, and at Kinnoull near Perth. The stones known by the names of Carnelian, Calcedony, Onyx, Sardonyx, Mocha-stone, Blood-stone, Chrysoprase, and Plasma, are closely allied to Agate, and in chemical composition they are not distinguishable, except in the case of the Chrysoprase, by its colouring matter.

AGENT. [Principal and Agent.]

AGIO, a term applied in some parts of the continent to the premium or per centage allowed on a better sort of money when it is given in exchange for an in-

forior kind. Thus, at Hamburg, when 100 marks banco are exchangeable for 120 marks currency, the agio on banco is said to be 20 per cent.; it being always reckoned upon the more valuable money. In France, again, where payments can be demanded only in silver coin, a small premium is sometimes paid by the receiver in order to obtain gold coin; this premium is called the agio on gold.

When the per centage, or difference, is considered, with regard to the inferior sort of money, it is called discount. Thus, when 100 dollars in bank-notes are exchangeable for only 90 dollars in coin, the discount on the paper is said to be

10 per cent.

AHM, AAM, on OHM, a German wine measure, varying in different places.
In Dantzic, it contains 33; in Hamburg, 313; in Hanover, 344; and in Rotter-

am, 33\frac{1}{2} imp. galls. nearly.

ALABASTER (It. Alabastro, Fr. Albatro), a species of gypsum resembling marble, but softer, takes a duller polish, and when pure is much whiter and semi-transparent. Some stones, however, of a veined and coloured appearance, and also certain transparent and yellow ones of a sparry nature, are termed alabasters. It is used for small statues, lamps, vases, and other ornaments. The finest is found near Volterra, in Tuscany. It is also procured in Staffordshire, Derbyshire, and in great abundance on the shores of the Bristol Channel, between Watchet and Minchead where it is manufactured into tows and ornaments.

Minchead, where it is manufactured into toys and ornaments.

ALBATA, British Plate or German Silver, a compound of tin, copper, and nickel, now extensively used in this country in the manufacture of a variety of articles which were formerly plated or made entirely of silver. Albata goods do not look so well as those plated, when the latter are entirely new, but they possess superior durability. Birmingham and Sheffield are the principal seats of this

manufacture

ALCOHOL (Fr. Esprit de Vin. Ger. Weingeist. It. Spirito di vino), is a liquid which forms the intoxicating principle of fermented liquors. It is by the distillation of such liquors that ardent spirits are obtained, and they receive the names of brandy, rum, gin, or whisky, according to the nature of the substance employed, but in every case consist almost entirely of three ingredients, viz. alcohol, water, and a little oil or resin, to which they owe their flavour and colour. When these liquids are redistilled, the first portion that comes over is a fine light, transparent fluid, known in commerce by the name of rectified spirits. When as highly rectified as possible, the specific gravity of the liquid obtained does not appear to be less than '820, and is generally more. Alcohol cannot, by this process, be deprived of the whole of the water with which it is combined; but by redistillation with hot muriate of lime, it is procured of the specific gravity '791 at 68', or '796 at 60' Fahrenheit. In this state it is the strongest that can at present be produced, and it is therefore called pure or absolute alcohol. The alcohol of commerce or spirit of wine, is never so strong as this; its specific gravity is seldom under '837. In this state it is fragrant, limpid, colourless, volatile, inflammable, and of a pungent agreeable taste. It has never been frozen. At 1733' it boils. It combines with water in every degree; and the proportion of it present in common spirits is best judged of by their specific gravity, and is usually ascertained by "Sikes' Hydrometer." The specific gravity of what is called pure alcohol being '796 at 60' Fahrenheit, and that of water 1'000, it follows, that the lighter a spirit is the stronger is it. What in this country is called proof spirits, was understood to be a mixture of equal bulks of alcohol and water; but this is not the case: it contains 52-100 parts of its weight of water. When spirits are weaker than this, they are said to be under proof; when stronger, to be above proof 'thus, " ALCOHOL (Fr. Esprit de Vin. Ger. Weingeist. It. Spirito di vino), is a liquid which forms the intoxicating principle of fermented liquors. It is by the distilla-

proof-spirit has been often indefinitely employed.

The great importance of accuracy in determining the strength of alcoholic mixtures induced the Lords of the Treasury, a few years ago, to request the Royal Society to give an opinion upon the subject. In the report of the committee of this body (drawn up by Mr Faraday), it is stated, that "a definite mixture of alcohol and water is as invariable in its value as absolute alcohol can be. It is also invariable in its nature." It is therefore proposed, "that standard spirit be that which, consisting of alcohol and water alone, shall have a specific gravity of 0.92 at the temperature of 62° Fahrenheit, water being unity at the same temperature; or in other words, that it shall at 62° weigh \$\frac{1}{16}\$, is, of \$\frac{1}{2}\$!the of an equal bulk of water at the same temperature." "This standard is rather weaker than the old proof spirit (the specific gravity of which, at 62° 0.916633), in the proportion of nearly 1.1 gallon of the present proof-spirit per cent." In regard to the specific gravity of any mixture of alcohol and water, "your committee are of opinion that the hydrometer

is the instrument best fitted, in the hands of the excise officer, to indicate that specific gravity, and they think it ought to be so graduated as to give the indication of strength, not upon an arbitrary scale, but in terms of specific gravity, at a fixed temperature, which in the present case should be 62°, or that of the standard spirit."

Alcohol is extensively used in the arts. It dissolves the resins, camphor, and the essential oils; and hence its use in varnish-making, in pharmacy, and in perfumery; while its fluidity at the lowest temperatures,—its antiseptic properties, and its purity and ready infiammbility, render it applicable to a great variety of other purposes. (Brande's Chemistry. Ure's Dictionary of Arts, art. Alcohol.) [Sprarts.]

ALDER (Ainus giutinosa), an aquatic tree, found in all parts of Europe, the north of Africa, and in Asia and North America. Its timber is reddish yellow in colour, and being soft works easily. It is much used for piles, pumps, and other underground purposes where it is kept constantly wet; and its stems, hollowed out, are among the best materials, next to metal, for waterpipes. The veiny knots are often cut into veneer. The bark is valuable for tanning; and the young shoots, when mixed with other ingredients, are used for dyeing. The alder rots when exposed to the weather, and when dry is subject to worms. when mixed with other ingredients, are used for dyeing. exposed to the weather, and when dry is subject to worms.

ALE. [BEER.] ALEXANDRIA.

ALE. [Bern.]
ALEXANDRIA. [Egypt.]
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ALGIERS extends about 500 miles along the northern shore of Africa, from about 8° 30′ east, to 1° 30′ west. It is bounded on that side by the Mediterranean, on the east by Tunis, south by the Sahara or Great Desert, and west by Morocco, from which it is separated by the desert of Angad. There are four provinces, Algiers Proper, Constantina, Titteri, and Mascara; the first was under the direct government of the Dey; the others under local rulers called Beys. In 1830, the principal part of the country was conquered by the French, by whom it is still retained. Population, about 2,000,000, one half being Kabyles or Berbers, and the rest chiefly Arabs, Moors, Cooloolis, Jews, and Soudan negroes.

Arans, Moors, Cooloons, Jews, and Soudan negroes.

The country is traversed by branches of the great mountain-chain of Atlas, and in general is well watered and nighty fertile. In the high grounds of the interior, the same plants can be reared as are cultivated on the opposite shores of the Mediterranean; while there is reason to believe that all the productions of more southern, and even of tropical climates, might on the low grounds near the coast be cultivated with advantage. The grain sown is whent, barley, maize, millet, dours and rice. The mountains are rich in metals and timber; and in the eastern parts, towards Oran and Mostagan, there is great abundance of fossil sait. The manufactures are inconsiderable. On the coast, near Bons, there are extensive coral banks, the seat of an important fishery, carried on chiefly by Italian vessels.

dours and rice. The mountains are rich in metals and timber; and in the eastern parts, towards Oran and Mostagan, there is great abundance of fossil salt. The manufactures are inconsiderable. On the coast, near Bona, there are extensive coral banks, the seat of an important fishery, carried on chiefly by Italian vessels.

Algiers, 359 48 Ns. 39 4' Rs., the principal city and port, rises in the form of an amphitheatre near the middle of the coast. It is defended on the seaside by very strong batteries. The harbour, a work of immense labour, is formed by two projecting moles; and is abut 15 feet deep; but it is unasfe, and vessels lying along it must be strongly fastened by cables. Formerly the population was about 70,000, heduding a number of Jews; but the expulsion of the Turks, and the emigration of the Moors, have since greatly reduced this number. Exports,—oil, wax, hides, skins, corn, fruit, wool, rugs, embroidered handkerchieß, ostrich feathers. Imports,—ootton goods, sills, sploes, netals, hardware, earthenware, and other manufactured goods.

The principal intercourse of Algiers is with France, Britain, Italy, and Spain. The extent of the British intercourse cannot be precisely ascertained, as the public accounts do not distinguish the trade of the different Barbary States, while large quantities of British manufactures, particularly cottons, are imported by way of Lephorn and Gibraitar. In 1832, the value of cottons imported into the town of Algiers, was from France, £7353; and of British cottons from Leghorn, £28,563; Gibraitar, £17,900; Tunis, £307; total, £46,765; in all, £44,182. In 1837 total, before, £23,567 of specie) was £703,787; of which French merchandise, £472,090; foreign merchandise, £231,767; in the same year the amount of imports into Algiers from France (exclusive of £83,507 of specie) was £703,787; of which French merchandise, £472,090; foreign merchandise, £231,767; in the same year the amount of exports to France was only £58,013 exclusive of £83,507 of specie) was £703,787; of which

be natural born subjects; and in explanation, it is enacted by 4 Geo. II. c. 21, § 2, that this privilege does not include the children of persons who, at the time of the birth, were attainted, or liable to the penalties of treason. By 13 Geo. III. c. 21, § 1, the benefit is extended to grandchildren of natural born subjects, i. e. to the children of persons declared to be naturalized by these statutes. Aliens cannot hold real property in the United Kingdom, but an alien may trade and acquire property in goods, money, and other personal estate. "Also," says Sir William Blackstone, "an alien may bring an action concerning personal property, and may make a will, and dispose of his personal estate: not as in France, where the king, at the death of an alien, is entitled to all he is worth by the droit d'aubaine in justificatus, unless he has a peculiar exemption" (I. 372). This hard law is now repealed in France, to the extent of allowing the representative of a foreigner to succeed to his property, in so far as Frenchmen hold the same privilege in the foreigner's native country (Code Civil, Liv. iii. Tit. i. ch. 2, art. 725). Alien enemies can hold no property in the United Kingdom, and cannot pursue actions. "The children of aliens," says Blackstone, "born here in England, are, generally speaking, natural born subjects, and entitled to all the privileges of such, in which the constitution of France differs from ours; for there, by their jus albinatus, if a child be born of foreign parents, it is an alien" (I. 374). By the later law of France, however, children of foreign parents may become naturalized by claiming the privilege in the course of a year following the attainment of majority, and declaring their determination to reside permanently in France (Code Civil, Liv. i. Tit. i. ch. 1, art. 9). The crown may grant to aliens letters of denization. A denizen may "take lands by purchase or devise, which an alien may not, but cannot take by inheritance: for his parent, through whom he must claim, being an alien, ha a Member of the legislature or of the Privy Council. By 13 Geo. II. c. 3, every foreign seaman who, in time of war, serves two years on board an English ship, by virtue of the King's Proclamation, is naturalized; and by statutes 13 Geo. II. c. 7; 20 Geo. II. c. 44; 22 Geo. II. c. 45; 2 Geo. III. c. 25, and 13 Geo. III. c. 25, all foreign Protestants, upon their residing seven years in any of the American colonies, without being absent two months at a time, and all such persons serving two years in a military capacity there, or being three years employed in the whale-fishery, without afterwards being more than one year absent from the king's dominions; and by 26 Geo. III. c. 50, § 24, 27, 28; and 28 Geo. III. c. 20, § 15, all foreigners who have established themselves and families in Britain, and carried on the southern whale-fishery, are naturalized as if by act of naturalization. In Ireland, the Parliament passed a temporary act (14 and 15 Cha. II. c. 18) for naturalizing all aliens of the Protestant religion intending to reside permanently with their families and property. By 7 & 8 Vict. c. 66, the statutory disabilities of aliens were, in respect of property, greatly mitigated. statutory disabilities of aliens were, in respect of property, greatly mitigated. By 6 & 7 Wm. IV. c. 11, all aliens, on their arrival from abroad, must declare

By 6 & 7 Wm. IV. c. 11, all alions, on their arrival from abroad, must declare their name and country to the chief officer of customs at the port of landing, and show him their passport, with a view to their being registered, under penalty of £2; and shipmasters must report all aliens brought over seas in their vessels, under a penalty of £20, and £10 additional for each alien on board.

ALKALIS, a class of chemical bodies characterized generally by their peculiar hot, bitter, and caustic taste; by their changing the colours of vegetable blues to green, and yellows to brown; and by their neutralizing acids, and forming with them the class of compounds called salts. The principal alkalis are ammonia, potash, and soda: an account of which, and such others as possess commercial interest, will be given under their proper heads. The value of any alkali is determined by an alkalimeter, a graduated instrument which shows the quantity of acid neutralized by a given weight of the sample, and hence the amount of pure alkali contained in it. The alkalimeter at present used, is minutely described in Mr Faraday's Chemical Manipulation.

contained in it. The alkalimeter at present used, is minutely described in Mr Faraday's Chemical Manipulation. S.

ALKANET (Fr. Oroanette. Ger. Orkanez-wurzel. It. Arganetta. Sp. Arcanetta), the root of a species of bugloss (Anchusa tinctoria), a native of the warmer parts of Europe. It is of a dark red colour, and white within; and imparts an additional statement of the second of the second

elegant tint to alcohol, wax, and to all unctuous substances.

ALL 14 ALO

The colouring matter is confined to the bark, and the small roots are preferred, as these have most bark in proportion to their bulk. Alkanet is produced in England; but the best is imported from near Montpellier in France, and from the Levant.

ALLIGATION, in commercial arithmetic, is a formula for ascertaining the

proportion of constituents or ingredients in a mixture.

I. To find what quantity of any number of ingredients, whose rates are given, will compose a mixture of a given rate. Rule—1. Write down the rates of the ingredients under each other. 2. Connect by a curved line, the rate of each ingredient, which is less than that of the mixture, with one or any number of those that are greater, and each greater rate with one or any number of those that are less. 3. Put the difference between the mixture rate, and that of each of the ingredients, opposite the contrary rate with which it is linked. 4. Then if only one difference and against any rate, it will be the quantity belonging to that rate; but if there be several, their sum against any raw, ... will be the quantity.

Example 1. Wine at 9s. per gallon is to be mixed with wine at 6s. per gallon; required the proportions so as to sell the mixture at 7s. per gallon. The mixture may be worth 90s. the gallon.

That is, the wine at 9s. per gall. must be to that at 6s., in the proportion of 1 to 2. Ans. 2 gallons at 17s.; 5 at 22s.; and 2 at 18s.

II. When the whole composition is limited to a certain quantity. Rule.—Find an answer as before, by linking; then say as the sum of the quantities, or differences thus determined, is to the given quantity, so is each ingredient found by linking, to the required quantity of each.

III. When one of the ingredients is limited to a certain quantity. Rule.—Take the difference between each price and the mean rate as before; then, as the difference of that ingredient whose quantity is given is to the rest of the differences respectively, so is the quantity given to the soveral quantities required.

In the same manner, questions of this kind may be worked when assembled the immediate and the same manner, questions of this kind may be worked when assembled the immediate and the same manner.

soveral quantities required.

In the same manner, questions of this kind may be worked when several of the ingredients are limited to certain quantities, by finding first for one limit, and then for another. In general, however, cases in alligation are best resolved by an analytical process, as they form what are called indeterminate or unlimited problems, from their admitting of a variety of answers. [Average.]

ALLOWANCES. [TARE.]

ALLOY, in coinage, a certain proportion of harder metal, mixed with pure gold

and silver, in order to render them less fiexible, and better adapted for general use.

ALLSPICE. [PIMENTO.]

ALMONDS (Du. Amandelen. Fr. Amandes. Ger. Mandeln. It. Mandels.

Por. Amendoas. Sp. Almendias), the kernel of the fruit of the almond tree
(Amygdalis communis), a native of Syria and Barbary, but now naturalized in the south of Europe. Almonds are of an oblong compressed shape, nutry taste, and are covered with a thick brown skin. There are two permanently distinct varieties,—the sweet and the bitter; but many subvarieties are distinguished in the places of growth. It is said that the eye can discover no difference between the sweet and bitter almonds, nor between the trees which produce them; and it is asserted (though without probability) that the same tree, by culture, has been and it is asserted (though without probability) that the same tree, by culture, has been made to bear both. Almonds are now little used in medicine; the sweet, are a common article of the dessert; the bitter, are used chiefly in cooking to give a flavour to other articles. Both become rancid by keeping. They are gathered in August and September, but are not generally shipped till the middle of October. They are imported into this country chiefly from Barbary, especially Mogadore, and from Valencia, Alicant, and Malaga, in Spain; small quantities are, besides, brought from France, Portugal, and Italy. Bitter almonds are obtained almost wholly from Barbary. The best gweet are the forder variety was the purplet. wholly from Barbary. The best sweet are the Jordan variety, brought from Malaga; they are longer, flatter, less pointed at one end, and less round at the other, and have a paler cuticle than the other kinds.

other, and have a paler cuticle than the other kinds.

Prior to 1832, when the duty was reduced, the consumption of almonds was only about 3000 cwta.

Annually; but it is now 8000 cwts. In 1836, there were imported 17,370 cwts.; re-exported, 8814 cwts.; and entered for consumption, 8061 cwts., yielding of customs revenue, £3101. The prices in bond, per cwt., quoted in the London market in July 1839, were, Jordan, £9 to £10; Valencia, £4, 10s.; Barbary, bitter, £2, 10s.

Customary Tares.—In the shell, 2-3d parts; in baskets of 1½ to 1½ cwt., 6 lbs. each; is nerons of 1½ to 2 cwt., 12 lbs. each.

Almond Oil., a fat or greasy substance expressed from sweet and bitter almonds. Sp. gr. 915. It is pale yellow, but becomes colourless when long exposed to light. It soon grows rancid, especially if in contact with oxygen. [Oil.] It is so plentiful, that 5½ lbs. of almonds have yielded 1 lb. 6 ox. of oil by cold expression, and ½ lb. more on heating them.

ALMUDE, a measure for liquids in various places. In Lisbon, it contains 3.64 imp. galls.; in Oporto, 5.61 do.; in Faro, 4.08 do.; and in Constantinople, 1.15 do. ALOE, AMERICAN. [Maguey.]

ALOES (Fr. Aloès. Ger. It. & Sp. Aloe. Pers. Sibbir), a bitter resinous juice, extracted from the leaves of a succulent plant of the same name. It is used as a

common purgative medicine. Three kinds are known to druggists, namely,—1. So-cotrins, from the island of Socotra, is sometimes imported in chests from the Levant; it is the purest, though seldom to be found genuine in this country: the aloes brought from the Cape Colony, and Melinda, are sometimes designated by the same name, but they are much inferior in quality. 2d, Hepatic, or liver-coloured aloes, is imported chiefly from Bombay in gourds; a darker kind is brought from Barbadoes. 3d, Caballine, known by its rank smell, is used only for horses. These varieties of aloes are said to differ only in purity and it is probable that they may be obaloes are said to differ only in purity, and it is probable that they may be obtained, in some instances, from different species of the same plant. Socotrine aloes tained, in some instances, from underent species of the same plant. Sectime aloes is said to be obtained by only draining the leaves, after being cut at their base: Hepatic or Barbadoes aloes, by boiling or slight pressure; and horse aloes seem to be a coarse preparation from the dregs of the last. Those of best quality are glossy, not very black, but brown; when rubbed or cut, of a yellow colour; compact, but easy to break; easily soluble; of an unpleasant peculiar smell, and an extremely bitton tests. hitter taste.

ALOE-WOOD (Fr. Bois d'Aloès. Ger. Aloe-hols. Lat. Lignum Aloes), called also Xylo-Aloes or Calambac, is procured from the interior part of the trunk of a large tree (Aquilaria, Agallochia of Roxburgh), growing in some parts of Assam, Cochin, and China. It is of a dark colour, and is saturated with a peculiar aromatic resinous matter, which is highly esteemed by eastern nations. This substance is said to be the produce of disease, as the sound wood is white and inodorous. It is used as a stimulating medicine, as well as an ingredient in incense. (Ainslie's

Materia Indica.)

Maleria Indica.)

ALQUEIRE, a corn measure in Portugal and Brazil. 100 alqueires of Lisbon

37½ imp. bushels; and 100 alqueires of Maranham = 124¾ imp. bushels.

ALUM (Arab. Shebb. Du. Aluin. Fr. Aluin. Ger. Alaun. It. Allume. Por. Pedrahime. Rus. Kvoassi. Sp. Aluinbre), an earthy salt extensively used in the arts. It is found native only in small quantities; but it has long been produced artificially. The basis of common alum is sulphate of alumina, combined with sulphate of potash. It is brittle colonyless incorrous has a sweetish astringent. arts. It is found native only in small quantities; but it has long been produced artificially. The basis of common alum is sulphate of alumina, combined with sulphate of potash. It is brittle, colourless, inodorous, has a sweetish astringent taste, and crystallizes generally in transparent octahedrons. Sp. gr. 1.73. Water at 60° Fahren. dissolves about 1-15th, and at 212°, about 3-4ths of its weight of alum. Its contamination with iron may be detected by nut-gall, or prussiate of potash; the last will give solution of alum a blue tint if it contain iron. The most extensive alum-works in Britain are at Hurlett and Campsie, near Glasgow, where it is prepared from slaty-clay, obtained from the shales of old coal-pits. It is also prepared extensively at Whitby, from a stratum of alum slate, said to extend 29 miles. But the British alum is inferior to the Roch alum imported from Smyrna, and also to the Roman alum manufactured at La Tolfa, near Rome. This last is the purest to the Roman alum, manufactured at La Tolfa, near Rome. This last is the purest of all, and is generally distinguished by being mixed with a little reddish powdery matter. Alum is also extensively produced in China, from whence it is exported to India. This salt is much used in dyeing and calico-printing, in consequence of the attraction of its base for colouring matter. It is also used in lake colours, leather dressing, pasting paper, clarifying liquors, by candlemakers to harden and whiten the tallow, &c. In medicine, it is employed as an astringent.

The price of British alum was lately quoted at 11s. per cwt., and Roch, at 24s. to 36s. per cwt. Customary Tare, in casks, 10 to 12 per cent.

AMADOU. [AGARIC.]
AMALGAM, a name applied to the combinations of mercury with other metals.
AMAZON-STONE, a crystallized variety of felspar, of a beautiful apple-green clour. Localities, Ural Mountains and South America.

AMBER (Fr. Succin. Ger. Bernstein. It. Ambra gialla. Lat. Succinum electrum. Rus. Jantar. Sp. Ambar), a solid, brittle, carbonaceous substance, found in beds of lignite, in various countries, more particularly on the Adriatic and Sicilian shores, and in Prussia, near the scacoast, between Memel and Dantzic, where there are regular mines of it. It is discovered generally in nodules, or small pieces of a white, yellow, or brown colour, and very commonly translucent. When bruised, it exhales yellow, or brown colour, and very commonly translucent. When bruised, it exhales a slight aromatic odour. It is susceptible of a good polish, and when rubbed it becomes electrical. Sp. gr. 1°07. It is sometimes adulterated with copal or other resins, which are detected by their different appearance, and by not exhaling the proper odour when burned. The origin of amber is uncertain; Mr Phillips states that it is commonly considered to be a fossil resin. It is imported into this country chiefly from the Baltic, and is used in varnishes, as well as for ornamental purposes in the manufacture of necklaces, &c. In oriental commerce, it is carried into India from Japan, Madagascar, and the Phillippines. (Ainslie's Materia Indica). AMBERGRIS (Fr. Ambergris. Ger. Ambra. It. Ambracani. Lat. Ambra grisea. Sp. & Por. Ambargris), a substance found principally in warm climates, floating on the sea, or thrown on the shore; it is said to be a morbid product of the spermaceti-whale. It is generally procured in small fragments, but sometimes in masses weighing upwards of 100 lbs. When good, it is solid, opaque, of a bright gray colour, which is darkest externally, and intermixed with yellow or reddish streaks. It has a fragrant and peculiar odour when heated or rubbed. Sp. gr. about 914. The best comes from Madagascar, Surinam, and Java. It is used as a perfume. It usually sells in London, at from 5s. to 1ls. per oz. This high price leads to frequent adulteration of the commodity.

AMBOYNA. [East Indian Islands.]

AMBOYNA, or LINGOA WOOD, a fancy wood of various colours, and having the shades generally small. It is much used in cabinet-work, and is imported from Ceram and Amboyna, in logs of about 2 feet wide.

AMETHYST (Fr. Amethyste. Ger. Ametyst. It. Amatista. Por. & Sp. Amstisto), a precious stone of a purplish violet colour, and great brilliancy. It is of two kinds, the oriental and common. Of these, the oriental, which is a species of sapphire, is by far the most valuable. The common or occidental amethyst is merely a coloured variety of quartz, or rock crystal, and is in beauty, lustre, and hardness, much inferior to the oriental amethyst. It occurs crystalized, in rounded pieces, and in massive portions; but its primary form, like that of quartz, is a slightly obtance brombed.

pieces, and in massive portions; but its primary form, like that of quartz, is a slightly obtuse rhomboid. It is most valuable when large, high coloured, and without flaws. It is found in India, Germany, Sweden, and Spain, but is imported into this country chiefly from Brazil. [Sapphire.]

AMIANTHUS. [Assestus.]

AMIANTHUS. [Assestus.]
AMMONIA, volatile alkali, or spirits of hartshorn, a pungent volatile substance, of great importance and extensive use, which is formed during the putrefactive fermentation of animal matter. When pure, it is a gaseous body, composed of three equivalents of hydrogen and one of azote; sp. gr. '590; but in medicine and the arts, it is generally used either in solution in water, or in combination with other substances.

LIQUID AMMONIA, or Hartshorn, is an aqueous solution of ammonia, prepared either by passing the gas as it is formed directly into water, or by distillation from sal-ammoniac, burnt bone, and water. In the former case, the sp. gr. is '880, in the latter '954. It is limpid, colourless, very volatile, has a pungent smell, and a caustic taste; and is one of the most useful stimulants in the materia medica.

ACETATE OF AMMONIA, Or SPIRIT OF MINDERERUS, is prepared by adding Sesquicarbonate of ammonia, to dilute acetic acid. It has a sweetish bitter taste; and is

carbonate of ammonia, to dilute acetic acid. It has a sweetish bitter taste; and is employed externally as a refrigerant, and internally as a diaphoretic.

Carbonate of Ammonia may be obtained by uniting one volume of carbonic acid gas with two volumes of ammonial gas. It is a dry, white, volatile powder, and is used as a stimulant in a preparation called Spirit of Sal Volatile. The Sesqui-corbonate of Ammonia is obtained by sublimation from a mixture of muriate or sulphate of ammonia and chalk, and usually occurs in cakes, broken out of the subliming vessel. When freeh, it is of a crystalline texture, semi-transparent, and hard, odour pungent, and taste penetrating. It is extensively used in chemical preparations. In medicine, it is employed as a stimulant, and is usually called smelling-salts. It is also used instead of yeast, in making some kinds of bread. making some kinds of bread.

making some kinds of bread.

MURIATE OF AMMONIA, OF SAL-AMMONIAC (Fr. Sel Ammoniac. Ger. Salmiak. It.
Sale Ammoniaco. Rus. Nuschatur), was originally procured from Egypt, where it
was made from the soot of camel's dung. It is now, however, prepared in abundance in this country, by decomposition of the ammonial fluid given off during the
preparation of coal-gas; also, by a complicated process, from bones and other refuse
of animal substances containing its ingredients. It is likewise found native at Etha of animal substances containing its ingredients. It is likewise found native at Etna and Vesuvius, in some of the Tuscan Lakes, and in Persia, Bucharia, &c. As generally obtained, it is in large cakes of a semi-circular form, translucent and colourless, with a sharp saline taste, but no smell. Sal-ammoniae is extensively employed in the arts. It is used in preparing aqua regia,—in soldering some of the metals,—in tinning iron and copper,—in the preparing of dyes; also in various chemical manufactures. It is exported in considerable quantities to Russia and other parts of the Continent, and to the United States.

AMMONIACUM (Arab. Feshook. Fr. Gomme Ammoniaque. Ger. Ammoniack), a gum resin, procured, according to some authorities, from the Heracleum gummiferum, but by others referred to the Ferula Orientalis. It has rather a heavy smell,

and a bitter sweet taste. It is in agglutinated masses of tears, or in separate dry drops, of a yellowish white colour. Sp. gr. 1-207. That which is decidedly guttiform, of a clear and deep buff colour externally, paler within, and free from impurities, is most esteemed. It is produced in Persia, Abyssinia, and other places, but is imported into the United Kingdom from India. It is used in medicine as a stimulant; and in the arts, to form the diamond cement employed to join pieces of broken

glass or porcelain.

AMPHORA. [Angora.]

AMSTERDAM. [Holland.]

ANCHOR (Fr. Anors. Ger. Anker. It. Anora. Sp. Ancla), a heavy hooked iron instrument for fixing a vessel in a harbour or road. Large ships carry four principal anchors, the sheet, best bower, small bower, and spare anchors; and two principal anonors, the sneet, cest couper, small conser, and spare anchors; and two small once besides, for particular purposes, namely, the stream and kedge. The form of this well-known instrument remained almost unchanged from a very early period, until of late years, when more complex methods of fabrication have been partially introduced. (Lardner's Cyclopaedia. Manufactures in Metal, v. i. p. 93.) Anchors are extensively manufactured in the United Kingdom; and nearly 2500 tons are annually exported to all parts of the world.

ANCHORAGE, a duty paid for the liberty of anchoring in a port. It means also a ship's anchoring ground.

ANCHORAGE, a duty paid for the liberty of anchoring in a port. It means also a ship's anchoring ground.

ANCHOYY (Fr. Anchois. It. Acciuga), a small fish (Engraulus encrasicholus, Cuvier), about the size of a finger, of a blueish-brown colour on the back, and silvery white on the belly. It abounds in the Mediterranean, particularly off Gorgona, near Leghorn, where it is taken in May, June, and July. It is also found on the coasts of France and Portugal, and occasionally on the shores of England. After being caught, and the heads and entrails separated, the bodies are salted and packed in small barrels, in which, if the air be excluded, they will keep for a considerable time. Genuine anchovies are small and firm, round backed, fibre red, with skin of a silvery white. Those that are dark brown without, with flabby pale coloured a silvery white. Those that are dark brown without, with flabby pale coloured flesh, and tapering much towards the tail, are commonly Sardines, an inferior species, frequently substituted for, or mixed with, the true kind. They are used as a condiment. About 140,000 lbs. are annually imported.

Customary Tare, in barrels of 16 lbs., 6 lbs. each

ANFORA, on AMPHORA, a Venetian liquid measure = 114 imp. galls. nearly.

ANFORA, OR AMPHORA, a Venetian liquid measure = 114 imp. galls. nearly. The ancient Roman amphora of 3 urns, contained about 6:39 imp. galls. and the ancient Greek amphora or amphoreus of 6 choi, was equal to 3:61 imp. galls. nearly. (Paucton's Metrologie.) ANGEL, an ancient English gold coin, first issued in 1465, by Edward IV., when it was valued at 6s. 8d. In the latter part of Henry VIII.'s reign, its value was raised to 8s.; and in the reign of Mary to 10s.; at which rate it was valued until the close of Charles I.'s reign; after which it was no longer coined.

The angelet or half angel of 3s. 4d., was anciently a very common coin; so much so, that forty pence became a proverbal expression for a small wager (Shakepeare's Henry VIII.); and it still remains the legal and established fee in many offices.

ANGEL, Angelet ICA (Exp. Angelicary) a large numballiference plant common in Britain.

remains the legal and established fee in many offices.

ANGELICA (Fr. Angelique), a large umbelliferous plant common in Britain, all whose parts have a fragrant aromatic smell, and a pleasant bitter taste. The A. Archangelica, a biennial, is generally cultivated in gardens for the use of confectioners, by whom a sweetmeat is made of the stalks. The roots are used in medicine, for which purpose, however, those from Spain and Bohemia are preferred. The common wild kind (A. sylvestris, a perennial) possesses properties similar to the ather than the same have the common with the same transfer (Deurstris, Perennial) possesses. the other, but is much weaker. (Duncan's Dispensatory.)

ry Tare in casks, 15 per cent.

ANGOLA extends from about lat. 1° to 12° S. along the W. coast of Africa; and comprehends the districts of Angola Proper, Loango, Congo, and Benguela. The whole is claimed by the Portuguese, but their settlements are chiefly confined to the The residence of the governor is at St Paul de Loando; pop. 8000.

This coast is very imperfectly known, as foreign intercourse is prohibited by the Portuguese. It appears to be certain, however, that the principal, or rather the sole object for which it is resorted to, is the trade in slaves, of whom, from 18,000 to 20,000 are said, by Mr Martin, to be annually exported, chiefly to Brazil. For the protection of this infamous traffic, a considerable military force is maintained on the coast, composed mostly of convicts.

ANGOSTURA, OR CUSPARIA BARK, in the materia medica, is a valuable tonic, obtained from the stem and branches of a species of Galipea,—the former being in flat, and the latter in quilled pieces. It breaks with a short and resinous fracin figt, and the latter in quineu pieces. It breaks with a most and resinces ture, is covered with an ash-coloured epidermis, is internally smooth, and of a dull brownish-yellow colour. Its odour is rather nauseous and fishy, and it has a strong bitter flavour, accompanied by a peculiar and somewhat aromatic pungency. It is found in the warmer parts of South America, especially in the neighbourhood of Angostura in Colombia.

A spurious and poisonous bark is sometimes met with under the name of angos-

A spurious and poisonous bark is sometimes met with under the name of angostura. "This is more intensely bitter, and in shorter and less regular pieces than the genuine; internally, it is nearly black, and externally, covered with a rough rust-coloured epidermis." (Brands's Pharmacy.)

ANIMI, improperly called gum animi, is a resin which exudes from a large tree (Hymenox) growing in South America. It is of a pale brownish-yellow colour, and is met with partly in transparent and somewhat unctuous grains or tears, and partly in larger brittle masses. It often contains a great many insects. Sp. gr. about 1'055. In commerce it is distinguished as "washed" and "scraped,"—the latter being the most valued. This resin is extensively used by varnish-makers. S. ANISEED is the product of an annual umbelliferous plant, a native of Egypt, but cultivated in various parts of Europe. It has an aromatic smu, and a warm sweetish taste. The small compact seed imported from Spain, is usually preferred to the lighter and larger kind, which is the growth of this country. It is an article of the materia medica.

Oil of Aniscet is a volatile fluid, obtained from the seeds by distillation; it concretes at about 50°, which is its leading character. It is in general imported for pharmaceutical use, from Spain; and is consumed chiefly in the preparation of horse medicines.

is consumed chiefly in the preparation of horse medicines.

ANKER, a liquid measure in various places. The English anker contains 10 wine gallons, or 8½ imp. galls. The Scottish anker of 20 Scottish pints, equal about 7½ imp. galls. In Copenhagen, the anker contains about 8½ imp. galls.; in Prussia, 7½; in Amsterdam, Riga, and Pernau, 8½; in Revel, 9½; and in Rostock, nearly 8 imp. galls.

ANNA, an Indian money of account, equal to the 16th part of a rupee, or about 1½d. sterling; also a small weight.

ANNAM, an empire in the eastern peninsula of India; bounded N. by China, E. and S. by the Gulf of Tonquin and Chinese Sea; and W. by Siam. It was established about the beginning of the present century, and comprises the kingdoms of Cochin-China, Tonquin, Kamboja, Chiampa, Bao or Boatan, and part of Laoz. Area vaguely estimated at 98,000 square miles; and population at 6,000,000. The capital, Hue, is one of the strongest fortified towns in Asia; pop. 100,000. The government is a deepotic monarchy, with a sort of council composed of the officers of state: the king is nominally a vassal of China.

The two extremittes of the empire. Kamboja on the 8. and Tonquin on the N. consist chiefly

government is a despotic monarchy, with a sort of council composed of the officers of state: the king is nominally a vassal of China.

The two extremities of the empire, Kamboja on the S. and Tonquin on the N., consist chiefly of low alluvial tracts, little elevated above the level of the sea; while the central part, or Cochin-China, is generally mountainous, with here and there valleys of considerable axtent and fertility. A material diversity of climate is found to obtain throughout the empire, resulting as well from physical aspect as from geographical situation. In the northern and southern provinces, the seasons observe the same course as in Malabar and Bengal, but in Cochin-China a high range of mountains produces the same effect as the central range of Hindostan, in reversing the order of measons; so that a dry season prevails during the south-west, and a wet one during the north-east monsoon,—the rains continuing from October till March. The climate is in general salubrious. The metallic productions are inconsiderable, except in Tonquin, which abounds both in the useful and precious metals. The mines are worked entirely by Chinese, and furnish employment, according to Mr Crawfurd, to about 25,000. The yearly produce of the silver mines is stated at about 213,600 onness. The vegetable species differ little from those in similar latitudes in other parts of India. Tea and silk are produced in the northern provinces; but, like all other productions of the country demanding the exercise of skill and intelligence, greatly inferior to those of China. Certain descriptions of chinamon, cardamums, eagle-wood, and other triling articles, are subject to the monpoly of the government. The domestic traffic of the country is chiefly carried on by the great rivers of Kamboja and Tonquin, or by the seacoast.

The foreign trade is greatly inferior to that of Siam. It is carried on chiefly with that country, China, and the British ports within the Straits of Malacca. The intercourse with China is partly by sea, and partly

the picul == 112 catties; and at Salgon, a picul of sugar == 1½ picul, or 150 catties. Rice is sold by the bag of 50 catties, though commonly 2 catties short of this amount.

Money.—The common money of account is the quan of 10 mas, or 600 sapeks. The only coin is the sapek, which is made of zinc; and the 600 forming a quan are commonly strung upon a filament of ratan, and in this manner kept for use; forming a bulky and most inconvenient currency. Ingots of gold and silver, stamped by the government, though current, are not considered coin. The Spanish dollar passes in Cochin-China, and is valued at 1½ quan by the government.

Dutics.—No import duties are levied; and the only article prohibited its oplum, which, however, is readily sold by the Chinese. An export duty of 5 per cent. is levied on cardenmuns, pepper, cinamon, ivory, rhinoceros' horns, esculent nests, sapan wood, ebony, and red wood; and on timber and cordage 10 per cent. The exportation of con, bullion, copper, agila wood, rice, and salt is contraband; but the prohibition is rather nominal than real; and the exportation of rice and salt is allowed by license. The chief port charge is a duty on the measurement of the vessel, the amount of which is lowest at the capital, and highest at Salgon,—an absurd distinction intended to counterbalance the natural disadvantages of the northern ports, and place them on an equality with the fine harbour of Salgon. (Craspird's Siam and Cochin-China.)

ANNATTO, on ARNOTTO (Du. Orleana, Rokoe. Fr. Rocou. Ger. Orlean. It. Oriana. Por. Oriana), a reddish dye, is an inspissated extract from the pellicles

It. Oriana. Por. Oriana), a reddish dye, is an inspissated extract from the pellicles of the seeds of the Bixa Orellana, a native of the Malayan archipelago. It is brought to this country from Brazil and Guiana, but it is also to be found in the East and West Indies. It is used by dyers for giving more or less of an orange cast to the west indies. It is used by dyers for giving more or less of an orange cast to the simple yellows,—as an ingredient in varnishes,—and for colouring cheese. Annatto is moderately hard, of a brown colour on the outside, and a dull red within. There are two kinds. Flag or Cake annatto, in cakes of about two or three pounds weight each, is generally enveloped in large flag leaves. Roll annatto, a more concentrated extract, is brought in small rolls of a few ounces weight, and contains a larger proportion of colouring matter than the former. This is the kind used chiefly in detries. chiefly in dairies.

The consumption of annatic has much increased of late years, partly from a great abatement of the duty in 1832. In 1836, the quantity entered for home consumption was 233,987 lbs.

ANNUITY, any fixed sum of money which is payable either yearly or in given portions at stated periods of the year. Annuities are of two kinds: first those called Certain, payable during a fixed term of years, the value of which is founded upon the operation of compound interest; and Annuities on Lives, in which the operation of compound interest is combined with the chances affecting the duration of human live. life.

life.

1. Annuities Certain for terms of years are currently sold by government, and by many of the insurance companies. Their value fluctuates with the market rate of interest; and the price of those sold by government, as well as by other parties, is generally regulated by the current rate of 3 per cent. stock;—the sum sunk in the purchase of an annuity producing a smaller, or a larger return, according as the price of stock is high or low. Thus, supposing 3 per cent. stock to be at par, or 100,—the rate of interest derived from investing money therein, being then only 3 per cent.,—a sum of £100 sunk in the purchase of an annuity from government for 20 years, would purchase only £6, 13s. 8d. per annum; but if the 3 per cents. fall to 80, they then yield a return of 3 per cent. interest for every £100 invested in them; and the same sum will purchase an annuity for 20 years of £7, 3s. The following table shows the rates at which the government annuities may be purchased at the common prices of stock:—

Annuities for Terms of Years which £100 (Money) will purchase, when the 3 per cent. Stock, ex dividend, is at the following prices:—

No. of Years.	£100 16 10	£93 0 6	£91 12 1 Rate.	£90 4 6	£88 17 9	£87 11 10	Hate.	£79 9 5 £80 10 9 Rate, £3.15ap.ct.
10 18 90 25 30 35 40 45 50 60 70 90 100	£ & d. 11 12 11 8 6 6 6 13 8 5 1 6 4 12 8 4 6 2 4 1 3 3 17 8 3 12 0 3 8 6 3 6 1 3 4 3 3 2	£ a. d. 11 15 10 8 9 6 6 16 5 17 5 5 4 10 4 16 1 1 4 9 8 4 4 11 4 1 2 3 16 0 3 12 7 3 10 4 3 8 3 7 8	£ a. d. 11 16 5 8 10 0 6 17 1 5 18 1 5 5 6 4 16 8 4 10 8 4 5 7 4 1 1 11 3 13 5 3 11 1 3 9 7	£ a d. 11 17 0 8 10 8 6 18 9 5 6 2 4 17 1 4 6 4 4 11 1 4 6 4 3 17 6 3 14 2 3 19 0 3 10 3 9 5	£ a. d. 11 17 6 8 11 3 6 18 19 4 5 6 10 4 18 1 4 11 10 4 7 1 4 3 3 3 15 1 3 19 11 3 10 4	£ a. d. 11 18 2 8 11 10 6 19 3 6 0 0 5 7 6 4 18 10 4 12 6 4 7 9 4 4 2 3 15 11 3 13 8 3 12 3	£ a d. 11 18 9 8 12 6 6 19 10 8 5 8 2 4 19 6 4 13 3 4 8 7 4 5 0 3 14 8 3 13 3 13 3	£ s. d. 12 1 8 8 15 6 7 3 0 6 3 11 5 11 7 5 3 1 4 16 11 4 12 4 8 10 4 4 0 3 19 0 3 17 9 3 16 10

2. Annuities on Lives are of different kinds, according as they are made to depend upon single lives, joint-lives, or upon lives subject to particular contingencies. They are, as well as the former class, currently sold by government, and also by insurance companies. Their value of course fluctuates with the market-rate of interest; but is mainly dependent upon the age of the nominee; being highest when the expectancy of life is greatest, and decreasing gradually as age advances. Of late years also, a distinction has been made between the sexes, as most observations unite in confirming the fact, that on the average females live longer than males. The following table shows the rates at which annuities on single lives are at present granted by government:—

LIFE ANNUITIES, which £100 (Money) will purchase when the 3 per cent. Stock, ex dividend, is at the following prices:—

Age of Nomi- nec.	£100, 16s. 10d., the		, der £93, 0s. 6d., the		der £86, 6a. 7d., the		£79, 9a. 5d., and under £80, 10a. 9d., the rate of interest being £3, 15a. per cent.	
	Male.	Female.	Male.	Female.	Male.	Female.	Mak.	Female.
	£ s. d.	£ a d.	£ s. d.	£ 0. d.	£s.d.	£ . d	£ a. d.	£ a d
15 90 25 30 38 40 45 45 66 67 75	4 13 0	4 6 11	4 17 3	4 11 9	5 1 6	4 15 6	5 5 10	4 19 9
,90 -	4 17 5	4 9 7	518	4 13 10	5 5 10	4 18 0	5 10 4	5 2 3
25	502	4 12 8	5 4 3	4 16 9	586	5 0 11	5 12 8	5 5 2
300	5 4 0	4 16 6	581	5 6 7	5 12 1	5 4 7	5 16 3	589
35	596	5 1 2	5 13 6	5 5 1	8 17 5	592	6 1 7	5 13 3
40 I	5 17 O	5 6 8	6 0 11	5 10 6	6 4 10	5 14 5	6 8 10	5 18 5
45	675	5 13 11	6 11 3	5 17 9	6 15 1	6 1 8	6 19 1	6 5 6
50 I	7 2 8	6 4 1	766	6 7 10	7 10 5	6 11 8	7 14 4	6 15 6
55	8 2 1	6 18 10	8 5 11	7 9 6	8 9 10	7 6 4	8 13 10	7 10 1
80	9 5 6	7 19 2	9 9 5	8 2 11	9 13 4	8 6 9	9 17 3	8 10 6
B5	11 1 0	9 8 9	111 4 11	9 19 7	11 8 10	9 16 4	11 12 11	10 0 4
žō	13 9 4	11 11 6	13 13 3	11 15 5	13 17 4	11 19 4	14 1 4	12 3 4
78	16 18 0	14 11 3	17 8 1	14 15 5	17 6 i	14 19 6	17 10 1	15 3 8
BOAup.	23 16 6	18 9 7	24 0 9	18 13 10	'ة تقادة ا	18 18 1	24 9 3	19 2 3

These annuities are payable half yearly, and are transferable; and upon the death of any nominee, a sum equal to one-fourth part of the annuity, besides arrears, will be payable to those entitled thereto, or their executors, provided the same shall be claimed within two years. They are sold at the National Debt Office; where tables may be obtained showing the values corresponding to all ages, and fluctuations of stock. Annuities on joint-lives, and for deferred periods, may be purchased on similar terms.

The annuities granted by insurance companies are in some cases based upon the Northampton table; in others, upon the Carlisle table, the Government tables, or some modification of them. [INTEREST AND ANNUITIES.]

In considering a life-annuity as a subject of commerce, it must be kept in view that it is susceptible of two different market prices, according as it is the purchaser or seller of the annuity that goes to market. The values stated above are applicable solely to the case of a party wishing to purchase an annuity. A party possessed of one on his own life, or on that of any other, wishing to sell, must be content to accept of a great deal less than its full value; as the contingent nature of the security, the difficulty of employing profitably capital repaid in small instalments, and other circumstances, have always depreciated the value of life-annuities, when viewed as mere objects of investment. The price at different periods depends upon the state of the money-market: but in general, a person who invests money in the purchase of annuities, demands as much as is calculated to replace the capital sum advanced by him, with interest considerably higher than the ordinary rate; formerly 8, 10, or 12 per cent. was charged; at present it is about 6 per cent. There are thus two market prices for annuities, depending upon the circumstances and necessities of the party going to market. In the first case, the purchaser of the annuity gets his money returned, making allowance for the chances of life, with interest at 3 per cent. or a little more; while the person who is forced to sell his annuity must be content to accept of such a price as will make a return to the money-dealer of about 6 per cent., exclusive of casualties. [Funds. Interest and Annuities. Reversions.]

Under the legacy act, 36 Geo. III. c. 52, annuities are valued by the Northampton table, at 4 per cent.

Redesmable Annuities are those which are redeemable on certain terms by the granter,—as by

repayment of the consideration-money. Life amnuities being attended with risk, are not within the reach of the usury laws, and are therefore used by landed proprietors, and others having a limited interest in their property, to evade them,—more especially when the market-rate of interest exceeds the legal rate. During the late war, the most exorbitant terms were frequently exacted for loans on annuity; and certain formalities in their creation were in consequence introduced by the act 83 Geo. III. c. 141 (explained by 3 Geo. IV. c. 92; and 7 Geo. IV. c. 75). By this statute annuity-bonds or instruments granted for *money in loan*, must be enrolled in Chancery within 30 days after their execution: it does not, however, extend to Scotland or Ireland.

ANTHRACITE is a mineral charcoal, black, light, and often with a shining surface, whence it is named glance coal. It is also called blind coal from its burning without flame. Anthracite is found in many of our coal-mines, but was little worked until lately, when its value became known in South Wales, where it is employed for smelting iron. In the United States it is used extensively, being burned in peopling grates adapted to its different combustion.

in peculiar grates adapted to its difficult combustion.
ANTIGUA. [West Indies.]
ANTIMONY (Fr. Antimoine. Ger. Spiesglans.] ANTIMONY (Fr. Antimoine. Ger. Spiesglans. Mal. Soormah. Tam. Anjana Kalloo), a metal extensively used in medicine; and in the arts employed in the composition of printing types, music-plates, &c. The metallic ore of commerce consists of sulphur and other impurities combined with the pure metal. This ore is found abundantly at Rosenau, in Hungary, and in other parts of Europe; but is imported into this country chiefly from the Malayan Archipelago. It is generally of a lead-gray colour, possessing considerable splendour, and is met with compact, in accicular crystals,—and in rhombic prisms of considerable size, and variously modified. Crude antimony is the name given in commerce to the sulphuret of the modified. Crude antimony is the name given in commerce to the sulphuret of the metal, after being separated from the impurities of the ore, by fusion, and a species of filtration. It is usually in the form of loaves, of a dark-gray colour, the goodness of which is estimated from their compactness and weight, the largeness and distinctness of the strise, and from their being entirely vaporizable by heat. Regulus of antimony, the pure metal after being separated from the sulphur, is commonly of a dusky-white colour, very brittle, and of a scaly texture. Sp. gr. about 6.8.

ANTWERP. [BEIGIUM.]

APPLE (Fr. Pomme. Ger. Apfel), the well-known fruit of the pyrus malus, is distinguished as being at once the most brisk and refreshing of the orchard fruits of the colder climates. It is also the most generally cultivated, as it remains the longest in season, and is used in the greatest number of ways. Apples, when ripe, rongest in season, and is used in the greatest number of ways. Apples, when ripe, yield easily to the pressure of the finger at the stalk-end of the fruit. The best for table are the Golden and Ribston Pippins, and for storing for kitchen-use, the Yorkshire Green and Stock Ledingtons. The Catalogue of the Horticultural Society of London, however, enumerates more than 1200 varieties. The chief localities of this fruit in Britain, are the Ciden districts in England, and Lanarkshire in Scotland. Apples are imported in considerable quantity from the Channel Islands, France, and the United States.

The wood of the apple tree is band and hand and tree is band and tree is band and tree.

The wood of the apple tree is hard and heavy, and well adapted for the working parts of machinery, if not under water.

APPRAISEMENT, on VALUATION, is generally used to designate the estima-APPRAISEMENT, or VALUATION, is generally used to designate the estimation of the pecuniary value of estates or commodities, made by a sworn appraiser or valuer. By 46 Geo. III. c. 45, appraisers must take out an annual license from the excise. The act applies to "every person who shall value or appraise any estate or property, real or personal, or any interest in possession or reversion, remainder or contingency in any estate, real or personal, or any goods, merchandise or effects, of whatsoever kind or description the same may be, for, or in expectation of any hire, gain, fee, or reward, or valuable consideration to be therefor paid to him" (§ 4). The pensity for acting without license is £50 for each offence (§ 6). Licensed auctioneers may act without taking out an appraiser's license (£2). Each appraisement must be extended on a stamp, in terms of the statute. APPRENTICE, an individual (generally under the age of twenty-one) who is subjected to an engagement to serve for a stipulated period under the practicer of some trade or profession, in matters referring thereto, on condition of receiving instruc-

trade or profession, in matters referring thereto, on condition of receiving instruc-

tion in return.

IN ENGLAND, it is held that by the common law no man can be prohibited from working in any lawful trade at his pleasure. By the statute 5 Elizabeth, chap. 4, this freedom was restricted in so far as, with some special exceptions, an apprenticeship of seven years was necessary to enable any person to set up, occupy, use, or exercise any craft, mystery, or occupation, and the form and manner of this engagement was strictly regulated. By 54 Geo. III. c. 96, the portion of this

statute affecting apprentices was repealed, and it was declared (§ 2), " that it shall and may be lawful for any person to take, or retain, or become an apprentice, though not according to the provisions of the said act: and that indentures, deeds, though not according to the provisions of the said act: and that indentures, deeds, and agreements in writing, entered into for that purpose, which would be otherwise valid and effectual, shall be valid and effectual in law." It was provided that the repeal should not affect the customs of the city of London, or those of any city, town, corporation, or company lawfully constituted. This latter reservation will be affected by 5 & 6 Wm. IV. c. 76, § 14, by which the exclusive privileges of corporations are abolished, and it is enacted, that "notwithstanding any custom or by-law, any person in any borough may keep any shop for the sale of all lawful wares and merchandises for wholesale or retail, and use every lawful trade, occupation, mystery, and handicraft, for hire, gain, sale, or otherwise within any borough." It is held that by the common law persons under the age of twenty-one cannot bind themselves so as to be liable to an action of covenant to fulfil the conditions, and that the father or guardian cannot bind the infant without his consent. Hence the the father or guardian cannot bind the infant without his consent. Hence the the father or guardian cannot bind the infant without his consent. Hence the undertaking is generally on the part of both, the parent or guardian becoming bound for the apprentice's faithful discharge of his duty. A youth, however, who has bound himself singly and fulfilled his apprenticeship will be entitled to the benefit of it. By the custom of London, an infant unmarried and above the age of fourteen may bind himself to a freeman. The covenant between the parties is contained in a mutual deed or indenture. In the city, indentures must be enrolled before the chamberlain within a year, on a petition to the mayor and aldermen, otherwise a soiri facius shall issue to the master to show cause why it is not enrolled; and if the omission is owing to the master, the apprentice may are out his indentures and the omission is owing to the master, the apprentice may sue out his indentures and be discharged. The father or other person who has covenanted for the apprentice is bound for his true performance of the articles. Every indenture entered into by an infant, is voidable at his election on his attaining the age of twenty-one; but if any adult have covenanted for his performance of his duties, that person continues liable; and so it has been held that a father who had become bound for his son was not released by his son's attaining majority during the currency of the period, but was liable for his then absenting himself (Cuming v. Hill, 1819, 3 B. § A. 59). The parties becoming bound with an apprentice, generally agree to pay the master a premium or fee, as a farther remuneration for his instructing the young person. By 8 Anne, c. 9, § 39, the full "sum paid, secured, or contracted for," must be stated in the indenture, otherwise it will be void,—the temporary act 42 Geo. III. c. 23, § 7, which gave power on payment of double duty to rectify the omission, having expired. Where an indenture was void by omission of the premium, it was found that the master had no action against the apprentice's father on a promissory note given as apprentice fee, though he had maintained the apprentice till he absconded (Jackson v. Warwich, 1797, 7 T. R. 121). By the stamp laws, if "any thing, not being money, shall, directly or indirectly, be given, assigned, conveyed, delivered, contracted for, to or for the use or benefit of any master, with or in respect of any such apprentice, &c., the duties, &c. should be paid for the full value of such thing or things" (8 Anne, c. 9, § 45). This has been held not to apply to the friends of an apprentice covenanting to maintain him and supply him with tinues liable; and so it has been held that a father who had become bound for his of such thing or things" (8 Anne, c. 9, § 45). This has been held not to apply to the friends of an apprentice covenanting to maintain him and supply him with clothes (Rex v. Leighton, 1792, 4 T. R. 732). Whatever an apprentice gains is gained to his master, who will not be deprived of his remedy by a defect in the contract. The contract of apprenticeship terminates by the consent of all the parties, or by the death of the apprentice, or by the death of the master. In this last case, however, though the obligation on the master to teach the apprentice is personal, and so terminates with his life, yet if he have become bound to provide the apprentice with food and clothing, his executors must fulfil the obligation in so far as they have assets. By the custom of London, it is held that, when the master dies the executors must bind the apprentice to another master in the same trade. The discharge of an apprentice requires to be in writing. By 6 Geo. IV. c. 16, § 49, the discharge of an apprentice requires to be in writing. By 6 Geo. IV. c. 16, § 49, the issuing of a commission (now flat) of bankruptcy against the master operates as a discharge

The enforcement of the mutual obligations between masters and apprentices is in a great measure committed to the Justices of Peace. By 20 Geo. II. c. 19, § 2; 33 Geo. III. c. 55, § 1; and 4 Geo. IV. c. 29, in the case of parish apprentices (see below) or those with whom an apprentice fee not exceeding £25 has been paid, the apprentice may summon his master to appear before two justices on a complaint of misusage, refusal of necessary provision, cruelty, or other ill-treatment, and the justices may discharge him by a warrant for which no fees are payable, and on consideration of the circumstances may cause the master to

refund the whole or any part of the premium; or two or more justices at special or petty sessions may impose on the master a fine not exceeding 40s. On the other hand, on complaint by a master of misdemeanour, miscarriage, or ill behaviour on the part of his apprentice, two justices may commit the latter to the house of correction for a period not exceeding one month, or discharge him. [FACTORIES.]

on the part of his apprentice, two justices may commit the latter to the house of correction for a period not exceeding one month, or discharge him. [Factories.] By 6 Geo. III. c. 25, and 4 Geo. IV. c. 34, any such apprentice abscending, may be compelled to make up for the time during which he has absented himself, or be imprisoned for three months, on eath being made by the master, or any steward or overseer, to a Justice of Peace. A master cannot recall any license he may have given to an apprentice to leave him; and if the master dismiss him for negligence, he may be bound in equity to refund part of the premium. By the custom of London, a freeman may turn away an apprentice for gaming (Burn's Justice. Sir E. Tom-lin's Law Dictionary. Smilt's Mercantile L. 372-376).

Parish Apprentices are such as are bound to inhabitants and occupiers of lands and tenements within the parish by church-wardens and overseers: and by 43 Eliz. C. 2, 85, and 18 Geo. III. c. 47, these officers are empowered, with the assent of two justices, to bind as apprentices children whose parents they judge unable to support them. But they must be bound for no longer a period than till they reach the age of twenty-one, and the engagement of a female is terminable with her marriage. By 56 Geo. III. c. 139, § 7, the child before being apprenticed must have attained the age of nine years. It is for the church-wardens and overseers, in their discretion, to find proper persons to whom they may bind parish apprentices; and the justices may compel them to receive the children, under penalty of £10 for the use of the poor, to be levied by distress and sale. The master, however, if he feel aggrieved by the order, may appeal to the sessions. Clergymen and gentlemen of fortune are liable, but officers of the army are exampted by the Mutiny Acts. Mere strangers who stand in no relation to the parish cannot be compelled to take apprentices, but occupants of lands in it, though they reside elsewhere, are liable. By 32 Geo. III. c. 57, provision is made f 76, § 15), the commissioners are empowered to issue rules and regulations as to apprenticeships (Burn's Justice and Statutes quoted).

In Scotland there has never been any general regulation enforcing apprenticeships, such as the act of 5 Elizabeth: and the conditions in each trade or pro-

fession are still regulated by their respective charters and by-laws. The period is generally five years. An apprenticeship confers no general privilege beyond the corporation of which the master is a member. It has been laid down, that the acts of parliament, giving special jurisdiction to justices of the peace in questions between master and apprentice, do not apply to Scotland (Tait's Justice, 4). This between master and apprentice, do not apply to Scotland (Tait's Justice, 4). This is undoubtedly the case with those enactments which refer to parish apprentices, of which there are none in this country, but in late cases it has been taken for granted that the act 4 Geo. IV. c. 34 embraces North Britain (Frame agt. Campbell, 9th June 1836, 14 D. B. M. 914). The stamp acts, as above referred to, apply to Scotland. The indenture must be attested by two male persons, who sign with the designation "witness" after their names, and who must have seen the principals subscribe or have heard them acknowledge their subscriptions, and whose names must be inserted in the testing clause. A minor pupil (that is, a boy under fourteen years of age, and a girl under twelve) cannot be bound, except through the engagement of a parent or guardian. A minor above pupillarity, if he have guardians, must have their consent; but if he have none, he may validly contract, though the engagement is liable to reduction on the ground of minority, and tract, though the engagement is liable to reduction on the ground of minority, and lesion, or injury to his interests. By the common law, an apprentice cannot enlist in the army, or enter the navy unless he has been bred at sea. The rule is often nullified by the annual mutiny act and other statutes (*Ersk. Inst. I. 8. 63. Tail's Justice of Peace. Burton's Manual*).

APRICOT (Fr. Abricot. Ger. Abprikat), the fruit of the Prunus Armeniaes, a tree widely diffused in Asia, and growing in abundance upon the cases of Africa, from whence the fruit, called there Mish-mish, is brought in a dried state to Egypt. Various kinds are cultivated in this country, particularly in the South of England. Of those cultivated upon walls, the Orange is the best for preserving, and the Moorpark and Turkey for the table. The Breds and the Brussels, both well-suited for preserving, are the kinds preferred when grown upon open standard trees. The wallfruit is said to be the finest, but the other is the best favoured.

ACHARA CORTIS a name given to impure pittin acid. [Nitrac Acha.]

The wallfruit is said to be the nest, but the other is the best involved.

AQUAFORTIS, a name given to impure nitric acid. [Nitric Acid.]

AQUA-MARINE. [Bertl.]

AQUA-REGIA. [Chlorine.]

AQUA, on AQUAVITÆ, a term absurdly applied to ardent spirits.

ARABIA extends from 12° to 34° N. lat., and from 33° to 60° E. long. It is bounded N. by Turkey in Asia; W. by the Red Sea, and Isthmus of Suez; S. by the Indian Ocean; and E. by the Persian Gulf. Its area is vaguely estimated at 1,000,000 square miles, and its population at 10,000,000; composed partly of the coast, who form a regular society, and partly of Bedouins or passes. square miles, and its population at 10,000,000; composed partly of the commercial inhabitants of the coast, who form a regular society, and partly of *Bedouins* or pastoral Arabs, who live in tents, and subsist by their flocks, or by the plunder of passing caravans. Arabia is subject to a great variety of rulers. In the coast districts, monarchies, more or less extensive, have been formed. The chief of these are, Hejaz, or the Sheriffat of Mecca, now subject to the Pacha of Egypt; the Imamat of Sanaa, or kingdom of Yemen; and the Imamat of Muscat. The remainder is of Sanaa, or kingdom of Yemen; and the Imamat of Muscat. The remainder is mostly divided among a vast number of petty sheiks, whose government resembles that which formerly prevailed among the Scottish clans. Noid, the central part, is possessed by the Wahabees, a body of religious reformers, who, about the beginning of the present century, overran nearly the whole peninsula, but since 1818, have been confined to their original district, by the Pacha of Egypt.

of the present century, overran nearly the whole peninsula, but since 1818, have been confined to their original district, by the Pacha of Egypt.

Arabla is proverblally an arid barren country. Searcely a single river exists; and almost the whole of the interior is occupied with sandy deserts,—diversified only by a few cases or spots of fertility. Some of the districts on the coast, however, particularly Yemen, are fertile and beautiful. The chief productions are coffee, which is grown in Yemen, at Bugosa, near feet-el-Fakin, gum-arabic, dates, pomegranates, figs, oranges, opobalsam, and a variety of odoriferous plants. Senna and the cotton-tree are also cultivated in Yemen; and indigo is cultivated about Zebid. There are no mines of the precious metals; but Niebuhr states that iron exists in the territory of feade; and that the lead-mines of Oman are productive. Arabia has long been celebrated for its horses: the best are bred in the desert bordering on Syria.

The commerce of Arabia may be divided into the maritime commerce of the Red Sea, from Hejas and Yemen; that of the Persian Gulf, from Miuscat and Bussora; and the caravan trade. The three leats are described under the articles Mucara, Tunker, and Caravan.

HEMALS, or Shemistrar or Miscca, comprises the N. and W. part, bordering on the Red Sea, If it she holy land of the Mohammedans, on account of its containing Mecca, the native town of Mohammed, and Medina, the city where he is interred. It is under the nominal dominion of the Grand Beignior, as protector of the holy citics, but in reality it is subject to the Pacha of Egypt. The other chief towns are Jiddah, the seaport of Mecca, and Yembo, the seaport of Medina. The maritime commerce of the country is almost all concentrated at Jiddah.

The inhabitants are almost all engaged in commerce, and business is transacted with punctuality and despatch. The trade is much influenced by the university of the same extent in the east; but the port is not commercial purposes. It is further influenced by a regulati

iron, &c. being sent in exchange for ghee, mats, barley, hides, slaves, tobacco, and gold. The number of vessels belonging to Jiddah and Yembo may be estimated at from 250 to 300. (Com. by Lieut. Weilited, I. N. to Go. Soc. Journal, vol. vi.)

Measures, Weights, and Money.—The native measures cannot be stated with accuracy. The hahr of 10 fraxils, 100 maunds, or 300 ratiles = 2323 lbs. avoird. Accounts are kept in cruse of 40 duances; 25 cruse pass for about 100 Spanish dollars. Of late years, the Egyptian measures, weights, and monies, have been much used.

IMAMAT OF SAMAA.—This state comprises the principal part of Yemen, situate in the S. and W. part of Arabia bordering on the Red Sea. The area is vaguely estimated at \$6,000 sq. miles, and pop. at 1,000,000. It is subject to an unam, a kind of hereditary monarch, whose capital is Samaa, pop. 30,001; but the commercial emporium of the country is Mocha.

Mocka, in 13° 20′ N., and 43° 20′ E., is the principal port in the Red Sea frequented by Europeans, pop. 5000. It is situate about 40 miles N. of Cape Bab el Mandeb, between two projecting points of land, which shelter vessels whose draught (if not more than 10 or 11 feet) allows them to anchor within a mile of the town; large once He further out, and are exposed as in an open road. Provisions are here plentiful and cheap, but good water is scarce. The principal article of export is coffee; the others are gum-arabic, tragacanth, myrrh, frankincense, civet, balsam, dates, accrus, rhinoceros' horns and hides, sagapenum, salep, senna, and sharks' inceptial articles of export is coffee; the others are gum-arabic, tragacanth, myrrh, frankincense, civet, balsam, dates, accrus, rhinoceros' horns and hides, sagapenum, salep, senna, and sharks' inceptial articles of export is coffee; the others are gum-arabic, tragacanth, myrrh, frankincense, civet, balsam, dates, tragacanth, myrrh, frankincense, civet, balsam, dates, accrus, rhinoceros' hounce the principal article of export is coffee; the others are gum-arabic, traga

ARANGOES, large beads formed from rough carnelian, formerly much used in

ARANGOES, targe beads formed from rough carnelian, formerly much used in the African slave trade.

ARBITRATION, a contract by which two or more parties engaged in a dispute agree, by an instrument called a submission, to leave the decision to a third party, called an arbiter or arbitrator. The submission is generally in the form of mutual bonds, binding each to obey the award under penalties. In contracts of partnership, it is usual to insert conditions of arbitration which have the effect of preventing one member from resorting to a lawsuit, unless a reference has proved ineffectual, or the others have refused to accede to it. Where the submission, as was frequently the case, came into existence in the course of a litigation, the English courts adopted the practice of enforcing the decision of the arbiter, as against litigants before the court, and by 9 & 10 Wm. III. c. 15, the same privilege was extended to all formal written submissions. The proper subjects of arbitration are those questions as to fact, which are generally referred to a jury,—a liquid debt specified and defined by deed is therefore not a proper subject. Where there is more than one arbiter, there is generally authority to choose an umpire if they cannot come to a decision,—and this last must be selected by voluntary choice, not by lot. The object of arbitration is a final determination, and so a reservation is void. An award to do an illegal act, or one which cannot be done by the party, is void. The courts exercise considerable discretion in overlooking minute deficiencies, and allowing exercise considerable discretion in overlooking minute deficiencies, and allowing the evident meaning and intention of the various parties to be put in practice; and though an award be void as to some portion of it, yet if it be specific in assigning to the parties the rights which the arbiters intended to bestow on them, it will be good as to the remainder. When a time is limited for making an award it cannot be protracted, except by prolongation consented to by parties, or permitted by rule of court. The courts will not relieve a person who has voluntarily submitted his case to an arbiter from the consequences of the decision, unless on grounds of corruption, partiality, or mistake. The law of Scotland as to arbitration, in principle resembles that of England. If the submission contain a clause of registration the decree-arbitral can be enforced as if it were the decree of a court. (Caldwell on decree-arbitral can be enforced as if it were the decree of a court. (Caldwell on Arbitration.

rbitration. Parker on Arbitration. 3 Wm. IV. c. 42.)
ARBITRATION OF EXCHANGE, the deduction of a proportional or arbitrated rate of exchange between two places through an intermediate place, in order to ascertain the most advantageous method of drawing or remitting. [Exchange.]

ARCHANGEL. [Russia.]
ARCHILL. [ORCHILL.]
ARCHIM, or PIK, the Turkish ell, is equal \(\) Imp. yard nearly. ARE, the unit of the French measures of surface, equal to 100 square metres, or about 1076 British square feet.
ARECA-NUT. [Betel-Nut.]
ARGENTINE REPUBLIC. [Buenos Ayres.]

ARGOL, a common name for crude Tartar, in the state in which it is taken from the inside of wine vessels. [Tartar.] & ARISTOLOCHIA, on SNAKE-ROOT (Fr. Serpentairs de Virginia. Ger. Virginiache Schlangenwurzel), the dried root of the A. serpentaris or Virginian snake-root. It consists of a short stock or head, with numerous rootlets three inches or more in length, thready, interlaced, and brittle; skin greenish yellow or brown, and pith iron-coloured. In odour and taste it resembles valerian and camphor. The root is all used, but the rootlets are more powerful than the solid part. It is employed in medicine, and its action is similar to that of camphor. Aristolochia is imported into this country from Virginia and Carolina. (Duncan's Dispensatory.) ARITHMETIC, COMMERCIAL. [ALLIGATION. AVERAGE. DISCOUNT, &c.] ARMS AND AMMUNITION. [GUN. GUNPOWDER.] & ARNOTTO. [ANNATTO.]

[ANNATTO.]

ARPENT, a land-measure in the old French system. The Arpent des eaux-et-forêts = 51.07 ares; the Arpent de Paris = 34.19 ares; and the Arpent Commun = 42.22 ares, or 1 British acre and 7 perches. The Arpent of Geneva = 51.66 ares,

or 6179 British square yards.

ARRACK (Du. Arak. Fr. Arac. Por. Araca), an oriental name for spirituous liquors of all kinds, but in this country applied generally to those distilled in India and the adjoining regions. Arrack was formerly prepared in considerable quantity at Goa, but the principal seats of the manufacture at present are, the islands of at Goa, but the principal seats of the manufacture at present are, the islands of Java and Coylon. In the former, it is commonly termed kneip, and is made from a mixture of 62 parts molasses, 35 parts rice, and 3 parts of the sweet juice called palm-wine or toddy, extracted from the flowers of different species of palm-trees. In the latter, it is entirely distilled from cocoa-nut tree toddy. Ceylon arrack is reckoned superior to that of Java; and in India, to which very large quantities are annually exported, it brings a price 10 or 15 per cent. higher. The prime cost of arrack at Columbo varies from 8d. to 10d. per gallon. In India, it is prepared from the flowers of the Bassia longifolia, the Mahvah tree, and the Bassia latifolia. In Turkey, it is distilled from the skins of grapes, and flavoured with anisced. (Milburn's O.C.)

ARRANZADA, a Spanish land-measure, estimated, for vineyard land, equal to 3 Imp. roods 33 poles nearly.

ARRATELL, the Portuguese pound = 7083 troy grains; and 98½ arratels = 100 lbs. avoird.

lbs. avoird.

ARRESTMENT AND FORTHCOMING in Scotland, like foreign attachment in England [ATTACHMENT], is a process by which a creditor can lay an embarge on money due to his debtor by a third party, or on moveable property belonging to the same in the hands of such a party. If the debt has not been constituted by the decision of a court, the arrestment may be loosed if the debtor find security to pay. While the arrestment is in full force, if the person in whose hands it is taken pay his debt, or make over the property arrested to the arrester's debtor, he becomes liable for the debt. This process has of late been materially facilitated by the act 1 & 2 Vict. c. 114.

ARROBA, a Spanish and Portuguese weight; also a Spanish measure of capacity. It varies in different places. The Arroba Weight,—Spanish standard = 25.36 lbs. avoirdupois; Alicant = 27.38 do.; Valencia = 28.25 do.; Arragon = 27.76 do.; Portugal = 32.38 do. The Arroba Measure of Capacity,—Spanish standard for wine = 3.54 Imp. galls., and for oil = 2.78 do.; Malaga = 3.49 do.; Valencia = 2.59 do.; Canaries = 3.54 do.

ARROW-ROOT, a farinaceous substance procured in America, the West Indies, and Ceylon, from the root of the Marania arundinacea; and in India, from the and ceylon, from the root of the Marania arundinaces; and in India, from the tubers of the Curcuma angustifolia. It is prepared in nearly the same manner as starch; and when good, should be free from all musty flavour, white, insipid, and form a consistent jelly when dissolved in eight parts of boiling water. (Brande's Pharmacy.) It retains its nourishing property unimpaired for many years. Arrow-root forms a common article of food for children and invalids; and about 900,000 lbs. are now annually imported into this country, chiefly from the British West Indies, and very little of it is re-exported. The best is brought from the Bermudas, New Providence and Carlon. It is fraquently adultanted with natter carned and Providence, and Ceylon. It is frequently adulterated with potato starch, and great

care is necessary in purchasing it.

ARSENIC (Fr. Arsenic, Arsenic oxyde natif. Ger. Arsenik, weisse Arsenik. It. Arsenico, Arsenico üxneo), an exceedingly brittle metal, of a strong metallic lustre, and white colour, running into steel-gray. Sp. gr. 5.9. This substance, however, being very soft, is of little value, and is not used in the arts. The arsenic of commerce

is the white oxide of that metal, or more correctly arsenious acid, a compound which is obtained chiefly in Bohemia and Saxony, in reasting the cobalt cree for making saffre, and also by sublimation from arsenical pyrites. It is brittle, white, faintly sweetish in taste, more or less translucent, and is generally met with in cakes or their fragments, retaining the shape of the subliming vessel; sometimes it has a yellow or reddish tinge owing to the presence of iron, sulphur, and other impurities; from these it is freed for pharmaceutical use by resublimation, when it is often obtained in vitreous transparent cakes, which, however, soon grow opaque and crumble. Sp. gr. 372. In the shops it is commonly offered for sale in the form of a fine smooth powder, which is liable to adulteration with chalk and gypsum; but the fraud is easily detected by exposing the suspected substance to heat, when but the fraud is easily detected by exposing the suspected substance to heat, when the pure acid is entirely sublimed, and the additions remain. Arsenious acid, though one of the most virulent poisons, is used in medicine. It is also employed as an ingredient in Scheele's Green and other dyes, and in the manufacture of flint-glass. Arsenio forms with sulphur two compounds, which are known in commerce under the names of Realegae and Orphurent.

ARSHEEN, or ARCHIN, a Russian cloth measure = 28 Imp. inches or 0.71

French metre.

ARTABA, a Persian measure of capacity = 2 Imp. bushels nearly.

ARTABA, a Persian measure of capacity = 2 Imp. bushels nearly.

ARTICHOKE (Fr. Artichaul), an esculent vegetable (Cynara scotymus), having large perennial roots and annual stems, bearing large round heads. Each of these is composed of numerous oval calycinal scales, enclosing the florets, sitting on a broad fleshy receptacle; this and the fleshy base of the scales, being the only catable parts of the plant, are gathered before the expansion of the flowers.

Jerusalem Artichokes are the tubers of the Helianthus tuberosus, a kind of sunflower. This name is due to its strong resemblance in taste to the real artichokes.

AS, a denomination given to the ancient Roman *libra*, or pound of 12 *uncis*; also to the principal Roman coin. This last was composed chiefly of copper; and when first issued in the reign of Servius Tullius (a. c. 560) contained a pound of metal; but the weight was gradually diminished, until by the Papirian law (a. c. 178), asses of the weight was gradually diminished, until by the Papirian law (B. C. 178), assess of half an ounce were coined. This rate was continued till Pliny's time (A. C. 70), and long after. The weight and value of the as, at different periods, is however a subject of much difference of opinion among antiquaries.

ASARABACCA (Fr. Assaret. Ger. Haselkraut), the root and leaves of the Asarum Europaum, a perennial plant indigenous in Britain, but generally imported from the Levant. It contains a camphor-like principle, and a bitter essence which is combined with gallic acid. It is used in veterinary medicine, and also as an ingredient in most of the cephalic snuffs.

ASBESTUS, OR AMIANTHUS, a mineral in silky filaments, which, when mixed with oil, may be were not a fire-proof cloth. Localities, Portsoy and Glorelg in

with oil, may be woven into a fire-proof cloth. Localities, Portsoy and Glenelg in Scotland, St Neverne in Cornwall, Corsica, and U. S. of America, where it is some-

times used as lamp-wick.

ASCENSION, a small island of volcanic origin, lying in 7° 56'S., and 14° 24' W., about 685 miles N.W. of 5t Helena, and 1450 from the W. coast of Africa. Length 8 miles; breadth 6. It belongs to Britain; and, being at present used as a store depot for the African squadron, is occupied by a detachment of marines, who are chiefly employed in rendering available its scanty resources for supplying the shipping with provisions and water.

sion lies within the immediate influence of the S.E. trade-wind; and as it is directly in Ascension lies within the immediate influence of the B.E. trade-wind; and as it is unresuy in the track of ships on their passage home from the East, such as do not touch at the Cape or St Helema, usually call here for refreshments. The roadstead at Georpetowo offers secure anchorage. This island was for a long time chiefly celebrated in the "Almanac des Gourmands," on account of the abundance of turtle found on it. The season for catching them is between February and July; and their usual weight is from 400 to 700 lbs. "The turtle of Ascension, when scientifically served up, is esteemed of high and undoubted merit; but it is in general too large to reach England."

ASH, a tree of which there are many varieties. The common ash (Fraxinus excelsior) is one of the most useful of the British forest trees, on account of its rapid growth, and the excellence of its hard tough wood. The timber of the common ash is that chiefly used for agricultural implements. It is also esteemed for the purposes of the coachmaker, cooper, and turner; and for ladders, poles, and other purposes which require strength, elasticity, and comparative lightness; while the underwood is excellent for hoops, rods, hop-poles, &c. It is, however, quite unsuitable for building purposes, as it neither stands moisture nor the weather. Of the known foreign species, the white American (F. Americana) is the only one that rivals the

ommon ash in value. It abounds chiefly in New Brunswick, Canada, and the

common ash in value. It abounds chiefly in New Brunswick, Canada, and one adjoining parts of the United States.

ASHES. [Potash. Barilla. Kell, &c.]

ASHLAR, a name given to rough stones; and to freestones when they are first taken out of the quarry. The term is also applied to a facing made of squared stones.

ASPARAGUS (Fr. Asperge), a well-known esculent vegetable (Asparagus officinalis), having a perennial root and annual stalks. The stems are cut for use when only a few inches above ground. There are two varieties,—the green and the red; the former is considered the best flavoured, but the latter, owing to its larger size and shows amearance, is more exteemed by gardeners.

and showy appearance, is more exteemed by gardeners.

ASPER, a small Turkish coin and money of account, equal at Constantinople to about the 100th part of a piastre. This proportion, however, varies in different places.

ASPHALTUM, a species of bitumen produced by the decomposition of vegetable matter. It is solid, brittle, of a black colour, vitreous lustre, and conchoidal fractions of the proportion of ture. It melts easily, and is very inflammable,—burning when pure without leaving ashes. Sp. gr. about 1.5. It abounds on the shores and surface of the Dead Sea, -burning when pure without leaving in Barbadoes, and in Trinidad, where it fills a basin of three miles in circumference. It also occurs in various parts of Britain and other countries. Asphaltum is some-

It also occurs in various parts of Britain and other countries. Asphaltum is sometimes employed, when mixed with grease, for a coating to ships, in place of tar; and a mastic or cement composed principally of it, has of late been used as a material for roofs and pavements.

ASS, a domestic quadruped resembling the horse, but much inferior to that animal, both in beauty and utility. The ass has nearly the same mouth-marks as the horse,—takes from 2 to 3 years in growing, and lives from 25 to 30. It is less subject to disease than the other, and being content with scanty and coarse fare, is employed in this country by more received in the country by more received subject to disease than the other, and being content with scanty and coarse fare, is employed in this country by poor people in drawing small carts, and in carrying burdens; the female is, besides, valued for her milk. The abject condition of this creature in northern climes is in part owing to its never being the subject of attention. In eastern countries, particularly in Arabia, where the breed is not only carefully tended, but frequently improved by intercourse with the fleet and fiery onagar (or wild ass), it is an animal of great strength and considerable beauty. ASSAFETIDA (Fr. It. & Por. Assafetida. Ger. Stinkander Assad. Arab. Hillect. Pers. Ungoozeh), a medicinal gum-resin, composed of the juice of the roots of the Ferula assafetida, a large umbelliferous plant growing in the provinces of Khorassan and Laristan, in Persia. In its recent state it is white and somi-fluid, but by exposure to the sun it gradually hardens, and assumes a reddish colour. It is

Khorassan and Laristan, in Persia. In its recent state it is white and somi-fluid, but by exposure to the sun it gradually hardens, and assumes a reddish colour. It is imported into this country by way of India, and in trade is met with in large irregular agglutinated masses of a waxy consistence, having a motley appearance owing to the mixture of white drops with others of a violet, red, and brown tint. It has a nauseous alliaseous smell, and a bitterish acrid taste. Those masses are to be selected which are clear, of a pale reddish colour, and variegated with a number of elegant white drops or tears. An inferior kind, full of sand and very fettid, is said to be a compound of garlic, sagapenum, turpentine, and a little of the real gum. Assafectida loses some of its smell and strength by keeping; it should, therefore, be preserved in bladders shut up in tin boxes, and kept apart. (Duncan's Dispensatory. Brande's Pharmacy.)
ASSAY, OR ASSAYING (Fr. Coupellation. Ger. Abtreiben auf der capelle), a

ASSAY, or ASSAYING (Fr. Coupellation. Ger. Abtroiben auf der capelle), a process by which the quality of gold and silver coin, plate, or bullion, is determined ASSETS, from the French assex, is used in England to signify goods enough to discharge the burden which is cast upon the executor or heir, of satisfying the debts and legacies of the testator or ancestor. They are divided into personal and real. The latter were not applicable to pay simple contract debts, until the passing of the act 3 & 4 Wm. IV. c. 104, intituled, "To render Freehold and Copyhold Estates Assets for the Payment of Simple and Contract Debts." On this subject, see Ram's Treatise of Assets, Debts, and Encumbrances. The word assets is employed in a more general sense to designate property presumed to be set apart to meet any obligation; thus the acceptor of a bill is said to have assets of the drawer in his bands. It is also commonly used in trade to designate the funds or property in hands. It is also commonly used in trade to designate the funds, or property in possession of a merchant, in contradistinction to his *liabilities* or obligations.

ASSIGNATS, the paper-money issued in France after the Revolution. The want of public confidence and stagnation in trade, caused by that event, having led to the withdrawal of nearly all the current coin, the revolutionary government, with the view of providing a substitute, and at same time creating a market for the confiscated property possessed by them, issued notes in the following form:—"National Property Assignat of 100 france." These notes were a legal tender; but they

differed from every other paper currency in not even professing to represent any specified thing; the relation of "National property" to 100 france obviously despecified thing; the relation of "National property" to 100 francs obviously depending on the comparative quantity of the property purchasable, and the number of assignats issued, neither of which was defined. The first issue was in May 1790, to the extent of 400 millions of francs, which bore interest by the day, like Exchequer bills. To this was added 800 millions in September 1790, without the liability to pay interest. The government, finding this an easy method of supporting their treasury without new taxes, seized every opportunity to increase their issues, so that in 1793 they amounted to 3626 millions; in 1794, to 8817 millions; in 1795, to 19,700 millions; and lastly, in September 1796, to 45,579 millions of francs, or the immense sum of £1,523,160,000. These excessive issues produced a rapid depreciation in the value of the paper, so that in 1796, an assignat of 100 francs, professing to be worth £4, was currently exchanged for 55 sous, or less than threepence. Having thus sunk below 1-300th part of their nominal value, they were called in,—the government offering to take them at 1 per cent. in payment of a forced loan, which was imposed in money, and to give mandâts, a new species of paper-currency, in exchange for them, at the rate of 3 per cent. The ultimate result was, that of the whole 45,579,000,000, 12,744,000,000 were in some way or other discharged; the remaining 32,835,000,000 continued waste-paper in the holders' hands. The manremaining 32,835,000,000 continued waste-paper in the holders' hands. The mandats were of the nominal value of 2,400,000,000 francs (or £96,000,000); but they came out at a discount, and gradually sunk to less than 1-70th of their nominal value. They were issued June 9, 1796, and extinguished, partly in the purchase of confiscated property, and partly in the payment of taxes, before the end of the following September.

lowing September.

This financial bubble produced more profligacy, injustice, and misery, throughout France, than all the proscriptions and sanguinary violence of the Reign of Terror. "Every body," says Mr Senior, "taxed his ingenuity to find employment for a currency of which the value evaporated from hour to hour. It was passed on as it was received, as if it burned every one's hands who touched it." "Those who depended on fixed money payments were reduced to beggary; and beggary at periods of general distress, is starvation. Every morning there were found in the waters, and on the shores of the Seine, the bodies of wretches who had preferred death by suicide to death by starvation. The state of the labouring classes was searcely more tolerable." The revolutionary convention made efforts equally violent and senseless, to prevent the constantly increasing depreciation of assignats in metallic money and in commodities; the rate at which corn, provisions, fuel. clothing, and other necessary articles, were to be exchangeable for assignats, was kned by law; and fine, imprisonment, confiscation, and death, were substituted for the ordinary motives to commercial transactions. Of course, the majority of the shops were shut; and in those which continued open, only the worst articles were exposed to sale. The bakers' shops were the principal subjects of legislation. They were not to be entered without a certificate; and a long rope was extended from the counter into the street, which the file of candidates or purchase were to lay hold of, in order to ensure their entering the shop in fair succession. Many, however, spent whole nights in the street, in vain attempts to make their entrance; and somptimes the feeble were sufficient each and a long to the subject of legislation of the promoter of the contention feit the impossibility of using fear instead of hope as the motive of production and exchange; and their corrective laws were abandoned; but not without leaving on the minds of the French people a prejudice against

ASSIGNÈES, in the law of bankruptcy, are the persons to whom the realization, management, and distribution of the estate of a bankrupt are committed, subject to the control of the court of bankruptcy. They are either official, provisional, or chosen. Assigness, Official, are officers of the court of bankruptcy, appointed to coperate in town bankruptcies with the assignees chosen by the creditors, to prevent loss to the estate from the fraud, insolvency, or negligence of the latter. They were brought into existence by the Bankruptcy Court act, 1 & 2 Wm. IV. c. 56. They are appointed by the Lord Chancellor, to the number of thirty, and must consist of "merchants, brokers, accountants, or persons who are or have been engaged in trade in the city of London or Westminster, or the parts adjacent." One official assignee must act with the others chosen by the creditors; and in this capacity he subject to the regulation of the Chancellor and the Court of Bankruptcy. The is subject to the regulation of the Chancellor and the Court of Bankruptcy. official assignee acts alone till the creditors have made their election. All the personal estate, and the rents and profits of the real estate, and the proceeds of personal estate, and the rents and profits of the real estate, and the proceeds of sales vest in the official assignee alone, unless it be otherwise directed by the Court of Bankruptcy. He must deposit in the Bank of England, to the credit of the accountant-general, "all stock in the public funds or in any public company, and all monies, exchequer bills, India bonds, or other public securities, and all bills, notes, and other negotiable instruments," to be subject to the order of the court. On neglect of the above rule, he is liable (as in the case of the assignees chosen by the creditors) to be charged interest on the property at the rate of 20 per cent. Official assignees must not interfere with the assignees chosen by the creditors, "in the appointment or removal of a solicitor or attorney, or in directing the time and manner of effecting any sale of the bankrupt's estates or effects." (1 & 2 Wm. IV.

manner of effecting any sale of the bankrupt's estates or effects." (1 & 2 Wm. IV. c. 56, §§ 22, 23; 12 & 13 Vict. c. 106.)

Official assignees are in like manner appointed to act with the creditors' assignees in all bankruptcies prosecuted in the country; the official assignees, however, not to interfere with the creditors' assignees in the appointment of the solicitor chosen by them, or in directing the time and manner of disposing of the bankrupt's estate and effects. Fourteen days before a final dividend is advertised under any bankrupt's estate, a debtor and creditor account is to be furnished by the official assignees to the creditors' assignees, and to any creditor who may apply for the same, and to any other person, not being any creditor, upon payment of such sum, not exceeding two shillings and sixpence, as shall be fixed by the court. When only one or more partners of a firm are bankrupt, a creditor to the whole firm is entitled to vote in the choice of assignees, and to assent to or dissent from the certificate; such creditor not to receive any dividend out of the separate estate of the bankrupt till all the other creditors are paid the full amount of their debts, unless he as petitioning creditor. The commissioners, on stating their reasons, in writing, may appoint a provisional assignee until assignees be chosen by the creditors.

Assignees, Chosen, are the persons to whom the realization, management, and distribution of the bankrupt estate is intrusted, subject to the control of the com-

distribution of the bankrupt estate is intrusted, subject to the control of the commissioners and the court. In all bankruptcies, they act in concert with the official assignee as stated above. When the commissioners used to advertise three public meetings for the bankrupt to surrender and conform, the assignees were chosen at the second; and the number being limited to two by 1 & 2 Wm. IV. c. 56, § 20, the choice takes place at the first. The election is decided by a majority of the creditors who have proved to the amount of £10 and upwards. Votes may be given by anthority of letter of attorney on proof of the execution, either by affidavit before a Judge in Chancery, or parole oath before the commissioners; and, in the case of the creditor Chancery, or parole oath before the commissioners, man, and residing out of England, by oath before a magistrate duly attested by a notarypublic, British minister, or consul (12 & 13 Vict. c. 106.) The first duty of the assignees is to see that the bankruptcy is valid; to this end they are entitled to all serviceable information from the petitioning creditor. On ascertained defects, the serviceable information from the petitioning creditor. On ascertained defects, the assignees may apply to have the bankruptcy superseded, but such applications are received with jealousy. In country bankruptcies they still must keep an account in which is entered all property received from, and all payments made to account of, the bankrupt estate, to be open to the inspection of the creditors at all reasonable times. The commissioners may at any time summon assignees before them, and require them to produce all books, papers, deeds, writings, and other documents relating to the bankruptcy, in their possession, and may enforce their order by warrant and imprisonment if necessary. The majority at the meeting for choosing assignees may determine how and where the money received from time to time is to be deposited, and on their not so determine, the commissioners are to time is to be deposited, and on their not so determining, the commissioners are to direct. No money is to be paid into the hands of any commissioner, or the solicitor of the bankruptcy, or of any company in which a commissioner, an assignee, or the solicitor is interested (§ 102). Commissioners may direct money to be invested in exchequer bills, and how such exchequer bills are to be administered (§ 103); and any assignee retaining in his own hands, or employing for his own benefit, money to the extent of £100, or countenancing any other assignee in doing so, or neglecting when directed to invest money in exchequer bills, becomes chargeable with 20 per cent. interest on the amount during the period of misapplication (§ 104). If an assignee, being debtor to a bankrupt estate for money so misapplied, become If an assignee, being debtor to a bankrupt estate for money so misapplied, become bankrupt, his certificate can only have the effect of freeing his person from imprisonment, but his future effects (tools of trade, and necessary household goods, and wearing apparel of himself and family excepted) remain liable for the debt with interest (§ 105). Assignees are entitled to charge expenses necessarily disbursed on the bankruptcy. "As, on the one hand, they may not devolve upon an accountant duties which they are themselves competent to discharge, so, on the other hand, if they cannot do their duty to the creditors without calling in the aid of an accountant, they are justified in calling in such aid "(Henley's B. L. 213). Where an assignee is an accountant, he is not entitled to charge for business done in that capacity. A majority of the assignees choose the solicitor of the bankruptcy, who ought not either to be one of their number, or the private agent of the bankrupt. The assignees are liable to him for reimbursement and remuneration. Assignees, commissioners, and the solicitor are alike incapacitated from being purchasers of any part of the bankrupt estate, or of dividends. Assignees may, with approbation of the Subdivision Court, appoint the bankrupt to superintend the management of the estate, or to carry on the trade for the behoof of the creditors (1 & 2 Wm. IV. c. 56, § 35). At the meeting for the last examination of the bankrupt, the commissioners appoint a public meeting not less than form more appoints. missioners appoint a public meeting not less than four months after the date of the

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flat, and not more than six months after that of the meeting (of which twenty-one days' notice must be given in the Gazette), to audit the accounts of the assignees, who must deliver a state on oath of all monies received by them, and when and on what account the same have been employed, and the commissioners examining the accounts must ascertain what balances have been in hand from time to time, and whether any sum appearing in hand ought to be retained.

Assignees may be examined on oath touching the truth of the accounts. The proceeds of the estate of the bankrupt must not be deposited in any banking-house or place in which any assignee, commissioner or solicitor is interested. Assignees are of the nature of trustees, each is responsible only for his own acts, and there is contribution between them to reimburse an assignee for payments occasioned by their joint acts.

Vesting and Disposal of Bankrupt Estate.—Previously to the Bankrupts' Court Act the estate and effects of the bankrupt were assigned, with the exception noticed below, by the commissioners acting in the commission. By 1 & 2 Wm. IV. c. 56, \$\$ 25, 26, all the bankrupt's personal estate, and all his real estate in the united kingdom and the colonies, vests in the assignees by their appointment, without any deed of conveyance. When, according to the laws of the place where the real property is situated, a conveyance requires to be recorded, the certificate of the appointment of the assignees is registered (\$ 27). The above provisions refer to those species of property which, by 6 Geo. IV. c. 16, were appointed to be assigned by the commissioners. From this method of disposal estates tail in England and Ireland, and copyholds, were excepted, the commissioners being authorized to sell them for the benefit of the creditors (\$\$ 65, 68), and by the Fine and Recovery Act, 3 & 4 Wm. IV. c. 16, \$ 77, all powers vested in the bankrupt which he might execute for his own benefit (except the right of nomination to any ecclesistical benefice) may be executed by the assignees for behoof of the creditors. Where the bankrupt is invested with property in trust for the use of others, the court, on petition, will direct the assignees to transfer the same to proper persons for behoof of those interested (\$ 79). Where the bankrupt holds any government stock, funds, or annuities, or the stock of any public company in the United Kingdom, the commissioners may in writing direct the persons whose consent is necessary to that end, to transfer the same to the name of the assignees may, before the time of performance, fulfil the condition of redemption, as completely as the bankrupt might have done, and may dispose of the property recovered, in the usual manner (\$ 70). "If any bankrupt, being at the time insolvent, shall (except upon the marriage of any of his children, or any other person, any hereditaments, offices, fees, annuities, leases,

By § 72, "If any bankrupt, at the time he becomes bankrupt, shall, by the consent and permission of the true owner thereof, have in his possession, order, or disposition any goods or chattels, whereof he was reputed owner, or whereof he had taken upon him the sale, alteration, or disposition as owner, the commissioners shall have power to sell and dispose of the same for the benefit of the creditors under the commission: Provided that nothing herein contained shall invalidate or affect any transfer or assignment of any ship or vessel, or any share thereof, made as a security for any debt or debts, either by way of mortgage or assignment, duly registered according to the provisions of an act of parliament made in the fourth year of his present majesty, intituled An Act for the Registering of Vessels." The act alluded to is 4 Geo. IV. c. 41, for which 3 & 4 Wm. IV. c. 55 (see § 43) is now substituted. [Registray.] The property to which the foregoing enactment applies must come within the definition of personal goods and chattels, such as ships, furniture, utensils in trade, stock, bills of exchange, policies of insurance, shares in public companies and in newspapers, &c. "Chattel interests in lands, houses, and things affixed to the freehold, or shares in a company seised of real estate, are not within the statute" (Henley's B. L. 270). The provision only applies to property in hand at the time of the act of bankruptey, and not to goods received before or obtained after it. It has been laid down, that a removal on the day of the

bankruptcy does not take the property out of the statute, and the same was held where goods were fraudulently removed on the day before (Darby v. Smith, 1798, 8 T. R. 82). The possession must be with "consent and permission" of the owner, and so the property of infants incapable of consenting, or fraudulently obtained, is not within the statute. The interim possession by a carrier through whom the bankrupt has sent goods, does not alter the reputed ownership, but that of a pawnee holding in pledge does. Property deposited for a particular purpose is not held within the statute; thus, bills lodged with a banker for the purpose of obtaining payment do not vest, but it is otherwise where they are not remitted for a particular but the banker for the purpose of the particular purpose. purpose, but to be discounted and credited to the remitter. Goods in the hands of a factor do not pass to his assignees, but those on sale and return are within the statute. The question of reputed ownership is generally a question of fact for the

Among the other effects of the bankrupt, which vest in the assignees are, 1st, Property in right of his wife, unless she hold it by the custom of London as a sole trader, or it is settled to her separate use. 2d, Choses in action, including whatever right existed in the bankrupt to sue for performance of beneficial contracts, and for remedy his new party, but not of personal wrongs. By 6 Geo. existed in the bankrupt to sue for performance of benencial contracts, and for remedy of wrongs committed as against his property, but not of personal wrongs. By 6 Geo. IV.c. 16, § 76, where the bankrupt has entered on an agreement to purchase an estate or interest in land, the vender may require the assignces to choose whether they shall perform the agreement or not, and if they do not make their election, he may apply to the court for restoration of the property. 3d, Advowsons, which may be sold for behoof of the creditors, but if a vacancy occur before the sale, the bankrupt presents. 4th, Leases. On this subject we take the following remarks from Mr Smith: "The assignees are not bound to accept a term for years belonging to the bankrupt; for it might be burdened with rent and covenants beyond its value, and prove a loss instead of a benefit to the creditors. Such an estate, till they have done some act to manifest their acceptance of it, remains in the bankrupt, subject to the right of the assignees to adopt it. It has frequently become a question, what acts will amount to such an adoption. The general rule is, that any intermedialing with amount to such an adoption. The general rule is, that any intermeddling with the estate, in the capacity of owner, amounts to an adoption of it; but not a mere experiment to ascertain its value. Thus, where the assignees entered and kept possession of the premises for three months, they were held to have adopted the lease, though the bankrupt's effects were on the premises during that period, and immediately after the sale they delivered up the key. But they were held not have adopted the term, by advertising it for sale, without stating it to belong to them, nor by or for whom it was to be sold, but only that there was a saleable term; for that might be a mere experiment to ascertain its value.

"The lease remaining in the bankrupt till the assignees' election, he would, in the mean while, and afterwards, in case of their refusing it, be liable to rent, and would be chargeable on his express covenants, whether the assignees accepted the lease or declined it. However, by st. I Geo. IV. c. 16, § 75,

"'A bankrupt entitled to any lease or agreement for a lease, if the assignees accept the same, shall not be liable to pay any rent accruing after the date of the commission, or to be sued in respect of any subsequent non-observance or non-performance of the conditions, covenants, or agreements therein contained; and if the

formance of the conditions, covenants, or agreements therein contained; and if the assignees decline the same, shall not be liable as aforesaid, in case he deliver up such lease or agreement to the lessor or such person agreeing to grant a lease, within fourteen days after he shall have had notice that the assignees shall have within fourteen days after he shall have had notice that the assignees shall have declined as aforesaid; and if the assignees shall not (upon being thereto required) elect whether they will accept or decline such lease or agreement for a lease, the lessor or person so agreeing as aforesaid, or any person entitled under such lessor or person so agreeing, shall be entitled to apply by petition to the Lord Chancellor, who may order them so to elect and to deliver up such lease or agreement, in case they shall decline the same, and the possession of the premises, or may make such other order therein as he shall think fit.'

"This section applies only to the case of a lessee, not to that of the assignee of a lessee. And though the bankrupt, complying with the provisions of the act, cannot be sued for any breach of covenant subsequent to the date of the flat, and is discharged from his express covenants contained in the lease, although he should come in again as the assignee of his own assignees; yet a surety for the performance of those covenants is liable for breaches accruing between the date of the commission and the delivery up of the lease. The assignees, as they may if they please repudiate the lease, so, if they do, are not allowed to take advantage of any covenants contained in it. If they accept it, they may, like ordinary assignees, exonerate themselves from future liability by assigning it over even to an insolvent

exonerate themselves from future liability by assigning it over even to an insolvent person" (Smith's Mercantile L. 567-569).

By 6 Geo. IV. c. 16, § 38, the assignees, with consent of a majority in value of the creditors assembled at a general meeting called on twenty-one days' notice in the Gazette, may compound with any debtor to the estate, or submit any dispute to arbiters to be chosen by the assignees and the majority in value on the one hand, and the person with whom they are in dispute on the other; "provided that if one-third in value or upwards of such creditors shall not attend at any such meeting (whereof such notice shall have been given as aforesaid), the assignees shall have power, with the consent of the commissioners, testified in writing under their hands, to do any of the matters aforesaid." By 1 & 2 Wm. IV. c. 56, § 43, the arbitration may be made a rule of court. [Arbitration.]

It is the duty of the assignees to bring the estate recovered to sale without unnecessary delay; and with this branch of management, the official assignee is prohibited from interfering (1 & 2 Wm. IV. c. 56, § 25). It is a general rule that the creditors not only as a body, but as individuals, are entitled to insist on a speedy realization of the property; and if assignees delay to make sale, though in opposition only to one individual, they will incur responsibility. However advantageous it may appear, a creditor cannot be dragged into a speedulation which may render the

appear, a creditor cannot be dragged into a speculation which may render the returns from the estate future and uncertain, and it has been laid down that the assignees under a separate bankruptcy against one partner, cannot engage in a new adventure with the solvent partner, without the consent of every one interested in the estate (Chancellor's opinion, Crawshay c. Collins, 1808, 15 Vesy, 228).

For the auditing of assignees' accounts and the payment of dividends, see Bank-

The Commissioners of the Bankruptcy Court have power to remove assignees on their own discretion, and without appeal. Assigness have been removed for on their own inscretcing, and without appear. Assigned have been learned to purchasing part of the bankrupt estate, and for permanently residing beyond the jurisdiction of the court. On removal of an assignee the rights he had acquired vest in his successor (Henley's Bankrupt L. 207-255. Smith's Mercantile L. 547-590. Statutes as quoted). [ACT OF BANKRUPTCT. BANKRUPTCT. PROOF. CERTIFI-

IN SCOTLAND the duties which correspond with those of the assignee in England, devolve on the trustee. [Sequestration. Trustee.]

IN IRELAND, by 12 & 13 Vict. c. 107, the law as to assignees in bankruptcy, devolve on the trustee. [Sequestration. Truster.]

In Ireland, by 12 & 13 Vict. c. 107, the law as to assignees in bankruptcy, is framed on the model of that of England,—there are, however, no official assignees, and therefore the rules applicable to the country bankruptcles only apply. The various sections embracing the subject are as follows: By § 72 assignees are to be chosen at the first sitting appointed by the commissioners; and §§ 74-77 provide for the vesting of the bankrupt's estate in the assignees, without conveyance. By § 78 a certificate of the appointment of assignees must be entered in the office for enrolment of matters relating to bankruptcy. By § 79 the commissioners are entitled to dispose of estates tall, in conformity with the provisions of the Fine and Recovery Act (3 & 4 Wm. IV. c. 74). Section 86 provides for goods in the reputed ownership of the bankrupt passing to assignees, with the exception of registered securities on ships (for which 4 Geo. IV. c. 41, is referred to instead of 3 & 4 Wm. IV. c. 55), and §§ 89-91, 94, provide as to leases, inchoate agreements to purchase real property, powers, and stock, vested in the bankrupt, as detailed above with regard to England. Section 102 empowers assignees with consent of commissioner) to compound debts, and submit disputes to arbitration. By § 121 assignees are to keep a book of accounts of the bankrupt's estate, and commissioners are empowered to summon assignees, and enforce production of documents; and by § 120-123, the vesting of money according to direction of majority of value of the creditors, and purchase of Exchequer bills by direction of commissioner are enjoined. Section 124 provides for auditing assignees' accounts.

ASSIGNMENT, Eng. & Ir.; ASSIGNATION, Scot. is an agreement, by which a right or interest in one person is transferred to another. The granter is called cedent or assigner, the receiver assign or assignee. In England an assignment is employed in real property, generally for the purpose of transferring temporary or d

In moveable property, when the assignment conveys property in the possession of the assigner, the contract comes properly under the head of "Sale." In its more limited acceptation, however, the term is generally used to express the conveyance of a right which the assigner has to the subject of the transaction. In this manner debts, contracts, and all those rights which in England are called choses in action, and by the civilians jura ad rem, are the proper subjects of assignment. Among the most ordinary assignments is the indorsation of bills of exchange, bills of lading, and such like. By an old rule of the common law of England, a chose in action could not be conveyed, because such conveyance led directly to "maintenance," or that offence which arises from the money of one person being employed in prosecuting the suit of another. This rule still holds good in the common law courts, with some exceptions, among which are assignments of bills by indorsation. To enable assignments of bonds to be supported in those courts, a power of attorney authorizing the assignee to sue in name of the assigner is employed, and the courts so far aid the transaction, that if the obligee in such a document has paid the contents to the original obligor after notice of the assignment, he cannot plead the payment in a suit at the instance of the assignee. Courts of equity have always given full force to assignments (Blackstone's Com. ii. 442).

In Scotland, intimation of an assignation to the obligee is necessary, not only to

to assignments (Blackstone's Com. ii. 442).

In Scotland, intimation of an assignation to the obligee is necessary, not only to give a preference to the assignee over one acquiring a posterior title, and to prevent the obligee from fulfilling his contract with the original obligor, but for the completion of the transference. The regular form of notice is made by the assignee or his procurator appearing before the obligee, or repairing to his dwelling house in presence of a notary and two witnesses, and reading the assignation or leaving a schedule of it. If the obligee is not in Sootland, the intimation must be made at the Register of it. If the obligee is not in Scotland, the intimation must be made as the regiment House. The narrative of the giving notice is reduced to a probative instrument by the notary. Professor Bell observes, that "an assignation [in England] of a debt due in Scotland, produced in a competition with creditors arresting the fund, will be ineffectual without intimation or something equivalent." A formal notice, attested by a notary public, is not always necessary,—equivalents are admitted. Thus an be ineffectual without intimation or something equivalent." A formal notice, attested by a notary public, is not always necessary,—equivalents are admitted. Thus an action, or any kind of legal execution, raised by the assignce against the debtor, is effectual notice. A bill accepted, or even protested for non-acceptance, is held sufficient notice of an assignation of a money-debt; and an acknowledgment of notice in the debtor's handwriting on the assignation, or in a paper apart, is sufficient. A partial payment will prove notice in so far as respects the debtor. Some transferences of property, which take place in the course of the administration of justice, or by the fixed rules of the law, are called assignations, as adjudications of real property, marriage in the case of the property of a female, &c. These do not require notice, but the debtor will be justified in paying to the original creditor until he is acquainted with the event. A mere document of debt may be transferred by indorsation; but a special assignation is necessary to convey the diligence that by indorsation; but a special assignation is necessary to convey the diligence that may have followed on it. Diligence (or execution) taken out in the name of the cedent, caunot be used in that of the assignee without judicial warrant (*Erskine's Inst.* b. iii, tit. b. Bell's Com. ii. 16-20).

Inst. b. iii. tit. 5. Bell's Com. ii. 16-20).

ASSIZE, an ordinance or decree regulating the price of bread, ale, fuel, or other common necessary of life. Bread was formerly rated according to the price of wheat. Assizes were in ancient times very common: and the power to set one on some articles still subsists, though it is seldom or never acted upon. The inutility of such regulations is now too obvious to require comment.

ASSURANCE. [INSURANCE ON LIVES.]

ATTACHMENT, in its general sense, is a writ issued by a court of justice on bare suggestion, or on the judges' own knowledge, against a party who has committed a contempt. Foreign attachment, by the custom of the city of London, is a process by which property in the hands of some party, other than the debtor, may be attached for payment of the debt. It may proceed from the court of the Mayor or of the Sheriff, but the former is the more advantageous. A debt may be attached in the hands of the garnishee (literally the person warned, viz. he who has the prothe Sheriff, but the former is the more advantageous. A debt may be attached in the hands of the garnishee (literally the person warned, viz. he who has the property of the debtor in his hands) before it is due, but cannot be levied till the term of payment. The original debtor must be summoned and have notice. Attachment cannot proceed on goods in the hands of a carrier (Comyns' Digest, v. Attachment). ATTORNEY, POWER OF. [Letter of Attorner.] AUCTION, SALE BY, is the public sale of property, to whatever person present will give the highest price for it. By the usual form in this country, the property is set up at a minimum, and intending purchasers bid above each other, until no one will bid more. By the form commonly called Dutch auction, a price higher

than that expected is named at the commencement, and gradually reduced until

than that expected is named at the commencement, and gradually reduced until some one consents to purchase.

In England, sales by auction come within the statute of frauds, 29 Ch. II. c. 3, and therefore, when the price of any article is £10 or upwards, the contract is not good unless the buyer take delivery of a part, or receive earnest, or a memorandum in writing be signed by the parties or their agents. In auctions, the auctioneer is from the commencement agent for the vendor, and, by bidding, the proposing purchaser is held also to constitute him his agent. It will be sufficient conformity with the statute of frauds, that the auctioneer write the initials of the purchaser's name opposite to the lot in the catalogue, if the conditions of the sale be annexed to the catalogue, or clearly referred to. An auctioneer, while acting as such, cannot purchase the property he is employed to sell. He has a lien for charges and auction duty, first on the goods, and when they have been delivered, on the price. An auctioneer is liable for deterioration of the goods through his negligence, but not for unavoidable casualties. [Bailment.] It is his duty to sell to the highest bidder, but no action will lie against him for not obtaining the price fixed by the vendor. The fall of the hammer decides the completion of the contract (unless some other criterion be adopted, such as the running of a sandglass, or the burning of the vendor. The fall of the hammer decides the completion of the contract (unless some other criterion be adopted, such as the running of a sandglass, or the burning of a candle), and until that event occurs a bidder may retract. It is said that in England, where the sum bid is £10 or upwards, and so comes within the statute of frauds, he may resile before the writing is completed. On the part of the exposer the sale must be conducted without the adoption of undue means for raising the price, and so that the lots may fall to the highest real bidder among intending purchasers. Fictitious bidding, by means of persons termed "white bonnets," is unlawful, and vitiates the sale. The clause of the act 42 Geo. III. c. 93, referred to below, counterness burning in the the acceptance of the sale. to below, countenances buying in by the exposer or his agent, provided "the fairness and reality of the transaction" be "certified." If due notice is given of such intention, therefore, the owner may bid. If the sale be advertised, however, as "without reserve," it would appear that he cannot do so. Fraudulent description or concealment will vitiate the transaction; it is a common fraud to mix effects son or conceament will vittate the transaction; it is a common traud to mix enects (such as pictures and other works of art) with collections which have acquired a reputation from the judgment of their possessor, and to sell the whole as having been his. Such a fraud will vitiate the transaction. On the other hand, bidders must not combine, or use other means to prevent the sums offered from rising to the extent they would reach were each person besides the final purchaser freely to bid, the utmost he intends to give. Thus the contract was voided where a purchaser declared to the people around him that he had a claim on the property exposed (Fullers Abmheus 1931-3 Read & Right 1931-19 Sectled three courses beging declared to the people around him that he had a claim on the property exposed (Fuller v. Abrahams, 1821; 3 Brod. & Bing. 116). In Scotland, three persons having been commissioned to bid for property at a sale, agreed that the one who had the highest commission should purchase at the upset price, and divide the difference among his associates; besides the reparation for fraud, the sale was found void (Murray v. Maowhan, 1st March 1783, M.9567). Where there are printed conditions of sale, they cannot be altered by the verbal statement of the auctioneer. It is sufficient publication of the conditions, that they are posted on the auctioneer's box, or on the wall of the room, or are attached to catalogues circulated among the frequenters. (Babington's Law of Auctions. Sugden's Law of Vendors, 18-45. Morton on Vendors and Purchasers, 148-165.)

Auctroneers is a person whose business is to conduct sales by auction: It is

AUCTIONEER, is a person whose business is to conduct sales by auction: It is his duty previously to the commencement of every sale to state the conditions under which the property is offered; to receive the respective biddings; and to declare the termination of the sale. For these purposes he commonly makes use of a hammer, upon the falling of which the biddings are closed.

In 1845, by 8 Vict. c. 15, the duties on sales by auction were repealed, and previous statutes so far as they related to the collection of them. Under this Act every auctioneer is required to take an annual excise license, for which £10 is to be paid; the license to be renewed ten days at least before the expiration thereof, on the fifth of July in every year, under the penalty of £100 for omission, and carrying on the business of an auctioneer without such license; a separate license is requisite to sell plate or other articles. But certain sales need not be conducted by a licensed auctioneer, namely, goods sold under a distress for less than £20, for rent or tithes, and under the provisions of certain small debts acts. By

§ 7, prior to the commencement of an auction, the auctioneer is required to sus end in some conspicuous part of the room a ticket or board, containing his full christian and surname and place of residence; and to produce his licence to, or deposit £10 with any officer of excise or customs, or stamps and taxes, who may demand its production; in default, he may be arrested at the termination of the sale, and conveyed before a justice, who may commit him to prison for any time not exceeding one calendar month, and this imprisonment is not to affect any proceedings for the penalty incurred for selling without a licence. On the production, within a week, of the licence, the deposit of £10 is to be returned by

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An auctioneer who has duly paid the licence-duty is not liable, in the city of London, to the penalties for acting as a broker without being admitted agreeably to 6 Anne, c. 16.

The not revenue derived from auction-duties in the year ended January 5, 1840, was in England £203,567; in Scotland, £31,014; in Ireland, £13,634; total, £386,405.

AUDIT, an examination of accounts by persons duly appointed.

AUNE, a French cloth measure; the aune usuelle = 47½ Imp. inches; the old aune of Paris = 464 Imp. inches.

AUSTRALIA. [New South Wales. Queen's Land. South Australia. VAN DIEMEN'S LAND, OF TASMANIA. VICTORIA. WESTERN AUSTRALIA.

VAN DIEMEN'S LAND, OF TASMANIA. VIOTORIA. WESTERN AUSTRALIA. I AUSTRIA, an empire situated betwirt lat. 42° and 51° N., and long. 8° and 26° E.; and bounded N. by Saxony, Prussia, Poland, and Russia; W. by Bavaria, Switzerland, and Piedmont; S. by Tuscany, the Ecclemiastical States, the Adriatic, and Turkey; E. by Turkey and Russia. Area, 255,226 square miles. Population, according to the latest returns, Austria Proper, 2,113,915; Styria, 859,841; Tyrol, 786,543; Bohemia, 3,897,076; Moravia and Austrian Silesia, 2,066,218; Illyria, 1,145,445; Galicia or Austrian Poland, 4,548,534; Hungary, Sclavonia, and Croatia, 11,536,431; Transylvania, 2,034,385; Dalmatia, 309,412; Venetian Lombardy, 4,532,581; total, 33,630,381. Capital, Vienna, pop. 330,000. The government is monarchical; in Hungary, the nation shares the legislative, and even the executive power, with the emperor; and the Tyrolese possess to a certain extent the same privileges. In other parts there are provincial diets, but they are consulted only as to the mode of raising the taxes; so that his imperial majesty is in a great measure an unlimited sovereign.

privileges. In other parts there are provincial diets, but they are consusted only as to the mode of raising the taxes; so that his imperial majesty is in a great measure an unlimited sovereign.

The Austrian empire being generally mountainous, the plains, which occur chiefly in Hungary and Galicia, occupy a comparatively small part of the surface. In point of climate, the whole may be divided into three regions. The southern extends from lat. 42° to 46° N., where the depth of winter recenbles the month of March in northern countries; and where are found the olive, myrtle, vine, fig-tree, and even pomegranata. In the middle region, from lat. 46° to 49° N., the olive is not found, but vines and maise thrive in favourable situations; winter lasts from 3 to 4 months; summer is warm, but variable; and the air is salurious, accept in the vicinity of the Hungarian marshes. The northern region extends from lat. 49° to 51° N., where the winter is severe, and lasts fully 5 months; vines and maise are no longer to be met with, and even wheat requires a choice of situation. The soil, though of endless variety, is in general fertile; but in agriculture, Austria has not kept pace with other European states. Great pains have, however, been lately taken to improve the land, and about 4-5ths of the entire area have been brought into use. The arable portion forms less than one half; the forests and woodlands more than a third; the vineyards about 1-36th; and the meadow and grazing ground, each about 1-11th of the available surface. The country abounds in minerals. The mines of gold and silver in Hungary and Transpivania, and of quicksilver at Idris in Carniola, are the richest in Europe; lead and copper are produced in considerable quantities; and the supply of iron is almost inexhaustible, though the quantity raised is limited by the dearness of fuel. Tin, calamine, sine, cobalt, animony, chrome, bismuth, manganese, also exist; and indeed nearly every metal except platinum, is to be found in Gifferent parts of the tempire. Sal

the introduction of Jacquard's machinery has produced a rapid extension of the silk manufacture, especially in Lower Ens., at Vienna, and in the Italian provinces. The cotton manufacture employs a great many hands, but it is not in a prosperous condition, and is indeed entirely supported by the present high rate of duty on foreign articles. The other manufactures are chiefly those of iron, leather, paper, and giass; the last chiefly in Bohemia. The proportion of the manufacturing classes to the agricultural, is said to be as one to four.

The internal commerce, though burdened in some branches by government monopolies, and by the frontier duties of each separate state, is still very considerable. The communication betwirt distant places is facilitated by navigable rivers, and generally by good reads, on which the government bestow great attention. Of the rivers, the most important are the Adigs, Po, Elbe, and above all the Danube, which, with its tributaries, pervades the whole empire, grossing, however, its eastern boundary at about 500 miles from the sea. An important aspect has been lately given to the navigation of the Danube by the introduction of steam-vessed. This was first accomplished in 1826, by two English shipbuilders, Andrews and Pritchard. A company has since been formed, with a charter for 25 years, to proceaute further this great object; and it is stated, that there are now 9 steam-boats on the river, forming a chain of communication betwirt Vienna and Constantinople. This navigation is throughout rather difficult, company has first stated, that the mouths of the river are now in the possession of Russias, who is said to view with jealousy the extension of this navigation. With the view of keeping the communication open, it has been proposed to cut a canal from the nearest point to Kustendil, on the Black Sea.

Vienna is the great storehouse of the internal trade of the empire; the other commercial towns are Prague, Pesth, Cronstadt, Lemberg, Brody, Botzen, Millan, Bergamo, Breedis, browling int

soreign trade is, however, almost wholly engrossed by Trieste and Venice, which are both tree ports.

Trieste is situated in 45° 38′ N., and 13° 46′ E., at the N.E. extremity of the Adriatic, pop. 51,346. It possesses a commodious harbour, and being a free port, and almost the only ouliet for the South of Germany, Illyria, and part of the Sclavonian provinces, its commerce is very extensive. Exports—glassware, hardware, beads, copper, wheat, rice, currants, raisins, hemp, iron, paper, raps, Russia leather, shumac, silk, steel, tobacco, timber, musical instruments, and other articles. Imports—principally sugar, cotton-wool, coffee, olive oil, cotton and woollen manufactures: the other articles, comparatively of small amount, are almonds, hides, wax, wool, valonia, gums, wheat, maize, barley, and hemp. Of these imports, a very considerable proportion is forwarded to other places, particularly to Venice. In 1836, no fewer than 1005 vessels engaged in foreign trade entered the port, and the total number of vessels entered, including coasters, was 4489, of 423,743 tons. The value of the trade with different places, in the same year, was as follows:—

Countries.	Imports.	Exports.	Countries.	Imports.	Exports.
Great Britain	£598,270		Roman States	£194,500	£254,850
Russia	290,290	82,810	Bicily	630,290	101,670
Sweden and Norway	27,500		Ionian Islands	39,370	72,960
Denmark	400	3,440	Greece	147,770	137,320
Prussia	1	17,360	Turkey	990,150	690,856
Germany	15,100	56,370	Egypt	736,380	130,550
Holland	66,760	48,100	Barbary	5,410	15,410
France	236,500		United States	319,155	171,850
Portugal	86,920	19,550	Brazil	854,190	15,790
Spain	25,845	7,060	South America	905,110	14,430
Sardinia	40,210	40.440	Austrian Ports	838,260	2,033,479
Tuscany	37,150	53,900	Total	£6,315,390	£4,536,245

The commerce of Trieste is rapidly increasing, and between the years 1836 and 1838 it had nearly doubled in amount. This arose chiefly from a more extended intercourse with Turkey, South America (especially Brasil), Britain, and the United States. The exports to Britain were more than doubled in the four years 1833-36; but little difference has occurred in the imports. About 140 British vessels arrive annually.

France is a magnificent city and port, standing near the N. extremity of the Adriatic, on a number

of small islands separated from each other by canals, and from the mainland by narrow shallows, pop. 143,000. Its commercial greatness dates from the middle ages; but since the discovery of the passage to India by the Cape of Good Hope, it has gradually diminished, and at present, although a free port, its trade is inconsiderable, compared with that of Trieste; being confined chiefly to the receiving and transmitting of goods through the medium of that city. Exports—silk, fruit, grain, woollens, paper, cheese, &c. Imports—chiefly olive oil, cotton, coffee, and sugar; with dried fish, wheat, lineed, indigo, tron, and other articles of smaller value. In 1835, the total value of the imports was £1,081,971; of which, £592,096, were brought via Trieste. About 30 British vessels arrive annually.

In 1836, the exports from Fissus amounted to £347,112, and from Ragues to £45,936, consisting chiefly of goods sent coastwise.

MEASURES, WEIGHTS, MONEY, AND FINANCES

WISHING AND THISTIE.

Measures and Weights.—The kinfter of 6
Vienna feet = 6:23 imp. feet; the Vienna all = 1
30-6 imp. inches; the post mile of 4000 kinftern = 471, or about 44 imp. miles.
The Vienna joch = 6899 imp. sq. yards, and 7:03 jochs = 10 imp. acres.
The Vienna wine etimer of 70 kopfen, 40 maasses, or 4 viertels = 12-46 imp. galls: the finder = 132 etimers; the dreyling is 30 etimers.
The corn metzen of 4 viertels or 8 achtels = 1-00 imp. bushel; and 100 metzen = 21½ imp. quarters: 30 metzen = 1 muth.
The Vienna pound of 4 quarters, 16 omnes, or 32 loths, = 8845 troy grains; and 100 ims. = 1 centner = 123½ ibs. avoirdupois: 20 ibs. = 1 stone. Gold and silver are weighed by the Vienna imark = 4333 troy grains.

or 3 lotal, = seed troy grains; and 100 ids. = 1 stone. Gold and silver are weighed by the Vienna mark = 4333 troy grains.

In Trieste, the woollen ell = 26.6 imp. Inches; the silk ell = 25.22 imp. Inches: the wine orna or eimer = 12.46 imp. galls; the barile = 1445 imp. galls; the oil orna = 10.7 Vienna has, or 14.17 imp. galls: 100 stajt of corn = 388 imp. quarters; but estimated commonly at 342 stajt to 100 imp. qrs. In other respects aame as above.

Money.—Accounts are kept in florins of 60 kreusers, each of 4 piennings: 20 florins are coined from the Cologne mark of fine silver; hence 1 florin = 28.04. nearly, and the par of exchange with London is 9 florins 50 kr. for £7. The other silver coins are the rixdollar of 2 florins (= 1½ German rixdollar of account), and gieces of 99.10, 5, and 3 kreusers: The souverain d'or = 27s. 10d.; and the ducat about 9s. 5d.; there are also copper pieces of 1.½ and ½ kreusers. The paper-currency consists of notes of the National Bank, and of the outstanding depreciated notes of the old Vienna State Bank, called "Wiener-Wahrung" (Vienna ralue), which are at a fixed discount of 60 per cent.: 100 florins specie or effective being = 250 florins W. W. the last are used chiefly in retail, and for wages, &c.; all large payments being made in National Bank notes or in silver.

Bulls upon Vienna are generally drawn in effective; and frequently the particular coin in which they are to be paid is specified—as in 90 krenser pieces. Usance is 14 days after acceptance; bills payable "medio mense" are reckoned due on the 18th; 3 days of grace are allowed, except when drawn at less than 7 days' sight or date.

**The Austrian National Bank was instituted in dand of the emptre, which had become depreciated and of the emptre, which had become depr

MILAN AND VEHICE.

Measures and Weights.—Since 1803, a system founded upon that of France has been used throughout the Italian provinces in all public transactions; thus 1000 atom; 100 dit, or 10 paimi = 1 metro or metro = 38-37 imp. inches; 1000 copi, 100 pinte, or 10 mine, = 1 soma or bectoitire, = 2751 imp. bushels; 10,000 grani, 1000 denari, 100 grossi, or 10 oncie, = 1 libbra nuova Italiana or kilogramme = 2794 ibs. avoird. The old measures and weights are still used in private business. private business.

private business.

In Muss, the braccio = 254 inches; 1 wine brents = 1572 imp, galls; 100 corn stajl = 50-2 imp, bushels; the moggio = 4-02 do.; the mark = 3637 tory grains; 36-45 lbs, grosso, or 138-78 lbs, sottile, = 100 lbs, avoird.: the rubbio of oil weighs 47 lbs, avoird.

In Vexice, the weollen braccio = 25-6 inches; the stilk braccio = 24-8 inches; 100 wine sechl = 237-6 imp, galls; 100 oorn stajl = 230 imp, bushels; the mark = 3631 troy grains; 35-77 lbs, grosso, or 150-54 lbs, sottile = 100 lbs, avoird.

Money.—Accounts are kept in lire Austriachi of 100 centisimi, or 30 soldi; 3 lire Aus. = 1 Austrian florin; hence the lire Aus. = 84d. sterling, nearly; and the par of exchange with London is 294 lire Aus. for £1, or as sometimes quoted, 484d. per 6 lire Austriachi.
Formerly, accounts were kept in the lire Italiana, equal in value to the French franc. Retail transactions are conducted in lire corrente, or lire piecole. 100 lire Aus. = 87 lire It. = 113A, lire corr. = 1694 lire opt. = 1694 lire opt. = 1694 lire opt. = 1694 lire opt. = 1694 lire, and their haives, &c., and of Austrian currency. The gold doppis of Milan = 15s. 74d.; the sequin = \$s. 5d.; and the scudo of 6 lire corrente = 3s. 74d.

Bills are usually drawn in London upon Milan and Venice, at 80 days after date. No days of grace can be claimed at Milan; but the holder may allow 3 days. No days of grace are allowed at Venice.

when drawn at less than 7 days' sight or date.

The Austrian National Bank was instituted in 1817, with the view of restoring the money standard of the empire, which had become depreciated by the excessive issues of irredeemable paper by the Vienna bank during the war. It commenced with a capital of 100,000 shares, each of 1000 florins of that depreciated paper (the Vienna bank being then discontinued), and of 100 florins in specie. The former was converted into government bonds, bearing interest at 25 per cent., payable in specie, and redeemable at 50 per cent.—the treasury at same time establishing a sinking fund for their redemption. The bank, though connected with the state, is under the management of a body of directors; and its accounts are published periodically. It advances money on bills and other securities, receives deposits, and issues notes for 5, 10, 25, 100, 500, and 1000 florins, which are payable in silver on demand. Branches have been established at Trieste, Milan, Prague, and other towns throughout the empire; and according to a late statement, the price of the shares had advanced to 1385.

The Public Revenue of Austria, estimated at £15,000,000, is derived chiefly from taxes researches.

The Public Revenue of Austria, estimated at £15,000,000, is derived chiefly from taxes, rates, evoun-lands, and mines. The expenditure is nearly the same, more than one-third being required to maintain a standing army of \$70,000 men. The accounts are, however, not made public. The national debt is about £60,000,000; principally in bonds called "metallics," from their

dividends being payable in specie; the remainder consists of such obligations in depreciated paper W.W. as have not yet been bought up, or converted by the government. The prices of Austrian stocks as recently quoted were:—5 per cents. 105; 4 per cents. 100; 3 per cents. 75‡. The only debt owing by Austria in Raigland is £2,500,000, raised by a loan contracted in 1823, with Mr Rothschild, at 82 per cent., in order to pay off a debt incurred to Great Britain during the war. The bonds are for £100 each, with coupons for the interest, at 5 per cent. payable in London half yearly, on 1st May and 1st November; they are transferable without registration, and are seldom offered for saie, being esteemed a safe and desirable investment.

abstract of treaty of commerce between great britain and austria, 3d july 1838.

ABSTRACT OF TREATY OF COMMERCE BETWEEN GREAT SEITAIN AND AUSTRIA, 3D JULY 1838.

1. The vessels of the two powers shall pay the same duties in their respective harbours, as the national vessels of each power. 2. All the productions of Austria, and which may be imported into the harbours of the Emperor, shall enjoy the same privileges; and vice vessel. 3. Articles, not the produces of the dominions of the two powers, imported from the harbours of Austria into British possessions, pay the same duties as if imported in British vessels. 4. All Austrian vessels proceeding from the harbours of the Danube, as far as Galax inclusive, as well as their cargoes, may sail direct for the ports of all British possessions, as if they came direct from the harbours of Austrian intrins; and reciprocally, all English vessels, as well as their cargoes, shall be admitted into Austrian harbours with the same immunities as Austrian vessels. 5. The productions of the ports of Anis and Africa within the Straits of Gibraliar, which, after being carried direct to Austrian ports, are themse sent in Austrian vessels to British ports, shall enjoy the same advantages as if imported by English vessels from Austrian ports. 6. All articles imported or exportation, or from the ports of the two countries, under the flags of either, whether in British or Austrian bortons, subjected to the same duties and premium. 7. Goods in bond from either country subjected to the same duties and permium. 7. The production of the purchase of imported. 8. The Austrian trade to the East Indies placed on the footing of the most favoured nations. 10. Treaty not to apply to trade between one port and another situated in the dominions of the same power. 11. The vessels and subjects of the two powers, in their trade and navigation, are always to enjoy reciprocally all the privileges of the most favoured nations in the ports of either. 12. Stipulations in treaty of 1615, as to trade between Austria and Ionian Islands, to continue in force. 13. This treaty to be binding

AVERAGE in the law of shipping is generally applied to the loss occasioned by any sacrifice made to insure the safety of a ship and cargo, and being a loss which underwriters have to replace, it constitutes part of the law of insurance. There underwriters have to replace, it constitutes part of the law of insurance. There are, technically speaking, two sorts of average, general average, and simple or particular average. The latter is an unmeaning term used merely in contradistinction to the other; to express those losses arising from the danger of the sea and otherwise, which are not made up by any contribution, but fall on the possessors of the article lost, or on those who may be responsible for its safety. General average dates back to the days of Rhodes. Its principles were fully developed by the earlier civilians; the maritime nations of the middle ages adopted them, and the system is in full practice over all the commercial world. The circumstance under which provisions of this law can be had recourse to is, when a vessel and the crew the provisions of this law can be had recourse to is, when a vessel and the crew, passengers, and cargo, are in such imminent danger as to render it necessary to make a sacrifice of a part, for the preservation of the whole. The simplest case is that of throwing goods overboard to lighten the ship. Here cargo is sacrificed, and the other proprietors of cargo, along with the shipowners, bear a share of the loss, according to their respective interests. In another instance, it may be necessary to cut away a mast, or slip an anchor. Here the sacrifice is against the shipowners, and the other parties interested must share the loss with them. It is of no moment how light and valuable may be the goods thrown overboard, or how much the reverse those saved. It is said that the act should be done with formality and deliberation, and with the consent of the majority of those on board. The circumstances, however, under which so extreme a measure is generally taken, do not often admit of form and deliberation, and the necessity for the act will have more weight than its regularity. Goods stowed on deck are presumed to be an encumbrance, and so not suitable subjects of average. A loss effected by inherent defect, or by sea risk, cannot be considered average; there must be an intention to sacrifice, and that intention must have been with the view of preserving the remaining property embarked in the adventure. It is held, that where a vessel having sustained an injury has to put into a port for repairs, the expense of putting into port and remaining there, is to be considered average loss, if the act was necessary for the safety of all concerned, but that the expense of the repairs (unless in so far as they may be solely necessary for the preservation of the cargo) falls on the shipowners. Property injured in the making of the sacrifice—such as a part of the ship cut away to facilitate the throwing overboard of goods, constitutes average. An accurate statement of the circumstances under which a jettison, or other loss on which average is claimed, should be entered in the log, and immediately on arrival, the master and with the consent of the majority of those on board. The circumstances, however,

should draw up a narrative of the circumstances, and make affidavit to them, along with his crew, that there may be no ground to presume that goods have been removed

when the crew, and there may be no ground to presume that goods have been removed since arrival.

The adjustment is generally made thus: The owners contribute according to the net value of ship and freight at the port of delivery, after deducting expenses. But ship provisions, wearing apparel, and seamen's wages, do not contribute. If the vessel has had to put back to the port of lading, the cargo is taken at invoice price; otherwise, the cargo is valued at the price it would bring at the port of destination, deducting freight and charges. Ship furniture is rated at the cost of remewal, with a deduction of one-third. The value of what is lost being thus estimated, is added to the value of what is saved, and the whole being divided according to the respective interests of the parties, the loss which each has to suffer is a sum bearing the same proportion to his share of the whole sum divided, which the loss sustained bears to the whole sum. (Abbot on Shipping, 342-363. Marshall on Insurance, 588-552. Stevens on Average. Martin on the Practice of Stating Averages.)

AVERAGE in arithmetic is the mean of two or more quantities. Thus, 4 is the average of 2 and 6; and 5 is the average of 2, 6, and 7. The averages most commonly required in trade are those of prices. Example: What is the average price per quarter of 300 quarters wheat, sold at 70s. per quarter; 260 quarters at 50s.; and 270 quarters at 60s.!

300 quarters at 70s. = £1050 at 50s. = 260 270

830) 2510 (Ans. £3:0:5} per quarter.

Further illustrations will be found under the heads Alligation and Equation OF PAYMENTS.

In calculations of this kind, it must be remembered, that the average of a set of averages is not the average of the whole, unless there are equal numbers of quantities in each set averaged.

AVOIRDUPOIS, the name of the British commercial weight. It is "probably

derived from avoirs (averia), the ancient name for goods, or chattels, and poids weight." (Report of Commissioners of Weights and Measures.)

weight." (Report of Commissioners of virtual and all and a state of the Atlantic, between lat. AXUNGE. [LARD.]
AZORES, on WESTERN ISLANDS, are situated in the Atlantic, between lat. 57° and 40° N., and long. 25° and 32° W., about 795 miles W. from Portugal, to which they belong. They consist of three groups, viz. 1. St Michael and St Mary; 2. Terceira, Fayal, Pico, St George, and Graciosa; 3. Flores and Corvo, exclusive of several islets. Pop. 205,000. The seat of government is Angra, in the latest of Terceira pop. 16.000. island of Terceira, pop. 16,000.

sive of several islets. Pop. 205,000. The seat of government is Angra, in the island of Terceira, pop. 16,000.

These islands are of volcanic origin, and are in general mountainous. The climate is mild and pure; and the soil highly fertile,—most of the islands abounding in vineyards, orange and lemon orchards, and pastures. The growth of wine is considerable: it is produced mostly in Pico, but is known as Fayal wine, from being shipped from the latter. From 8000 to 10,000 pipes are exported in favourable seasons to America and the West Indies. The remaining exports acchiedly from 8t Michaels, and consist of large quantities of fruit to Britain; and of corn and live-stock to Lisbon, Madeira, and the Canarles. The imports are, from England, cottons, woollens, haveaver, earthenware, and other manufactured goods; from America, boards, staves, lumber, fish, pitch, tar; and from Portugal, tobacco, sugar, coffee, dispensations, incluigences, images of saints, and relica. The principal shipping towns are Fonts del Gado in St Michaels, Angra in Terceira, and Fayal in the island of that name; but there is no good port, and as none of the anchorages afford shelter, ships are often obliged, by violent winds, to put to see at a very short notice, particularly in the months from October to April. In 1833, the British shipping that entered the Asores, and he invoice value of British imports and exports were as follows: St Michaels, ships entered, 305; tonnage, 21,903; imports, £56,437; exports, £100,116. Terceira, ships entered, 59; tonnage, 5419; imports, £7280; exports, £12,657. Fayad, ships entered, 33; tonnage, 367; imports, £260; and of exports in same period, £905,785. Measure, Weights, and Money, same as Portugal. (Geo. AZURE STONE, on LAPIS-LAZULI, a mineral substance of an azure blue colour. It is found massive; also, though rarely, in rhombic dodecahedrons. Sp. gr. 295. The massive is nearly opaque, and its blue colour is not uniform. Chief localities, China, Persia, Buoharia, and Siberia. The finer kind is prized b

highly valued by painters.

В.

41

BABLAH, called also Neb-neb, is the rind of the fruit of the Mimosa cineraria. It contains a considerable proportion of gallic acid; also tannin, a red colouring matter, and an azotized substance. Bablah has been imported from the East Indies and Senegal, as a substitute for the more expensive astringent dye-stuffs, and for communicating shades of drab to cotton.

BACON (Fr. Lard. Ger. Speck), the flesh of the hog salted and dried. [Hog.]

BADEN, a German grand-duchy, situated on the right bank of the Rhine in its upper course, between lat. 47° and 50° N.; and long. 7° and 10° E. Area, 5915 British square miles. Population in 1834, 1,231,319. Capital, Carlsruhe; pop. 20,500. Government a constitutional monarchy, with two chambers.

pop. 20,500. Government a constitutional monarchy, with two chambers. S

Baden has been called the "Eden of Germany," for although nearly one-half of its surface is occupied by the mountainous districts of the Black Forest and the Odenwald, it possesses a soil favourable to the growth of corn, wine, and fruit, and abounds in magnificent woods and navigable streams; while the proportion of waste lands to the whole soil is less than six acres in every thousand. Agriculture is the chief occupation of the people, and yields a surplus of grain for the markets of Switzerland and France. Tobacco, hemp of a very fine description, and flax, are also extensively cultivated. The average produce of the vine, which is chiefly grown on the high lands skirting the valleys of the Rhine and Maine, and Lake Constance, is estimated at about 4,000,000 gallons. Mining is carried on with partial success, the chief mineral producins being aliver, cobalt, copper, iron, manganese, salt, coal, alum, vitriol, and sulphur. The manufactures, though inconsiderable, have increased since the accession of Baden to the Prussian Commercial Union; the most extensive is perhaps that of the middling and coarser descriptions of linen; the chief others are woollens, cottons, silks, watches, lewellery, paper, and wooden ware, clocks, and straw-hats, for the production of which the Black Forest has been long celebrated. Pforsheim, Carisruhe, and Mannheim, are the principal manufacturing towns.

The exports consist of timber, grain, meal, oil, hides, wine, hemp, linen, tobacco, iron waves, and smaller commodities, to an amount exceeding one million sterling yearly; the imports of French and other wines, colonial produce, drugs and dyes, iron, steel, cottons, silks, fine wolless, horses, and castle. Baden is advantageously situated for trade from its position on the Rhine, Maine, Neckar, and other streams, which, besides securing to it an outlet for its own productions to France, Germany, and Switzerland, have rendered it a country of extensive transit.

belm and Freistett on the same river, Ludwigshafen and Constance on the Lake of Constance, and Heidelberg on the Neckar.

Measures and Weights.—The new aune of 2 feet = 6 French decimetres or 23.93 inches; the morgen = 36 ares or 0.6896 acre; the ohm = 150 litres or 33.915 Imp. galls.; the last of 20 malters = 30 hectolitres, or 10.93 Imp. quarters; and the centiner of 10 stones or 100 lbs. = 50 kilogrammes, or 1104 lbs. avoirdupois.

Morgo.—Accounts are stated in florins, each divided into 60 kreutzers. The Baden or Rhenish florin, being coined at the rate of 24½ to the Cologne mark of fine silver, is equal 1s. 8d. sterling.

Finance.—The estimate of the budget for 1837-38 was 13,095,596 fi. s-year, of which the share received from the Prussian Customs Union was 1,495,593 fi. National debt about 12,000,000 fi.

BAGGAGE. [PASSENGER.]

BAGGING, a coarse hempen fabric used as a wrapper for cotton wool, coffee,

BAGGING, a coarse hempen fabric used as a wrapper for cotton wool, coffee, and other articles. It is made chiefly at Dundee, for exportation to America.

BAILMENT, from the French bailler, to deliver,—a term peculiar to English law. Sir William Jones defines it as "a delivery of goods on a condition, expressed or implied, that they shall be restored by the bailee to the bailor, or according to his directions, as soon as the purpose for which they were bailed shall be answered" (Essay I. on Bailments). It embraces a variety of contracts, the nature of which is thus defined and illustrated by Blackstone: "a delivery of goods in trust, upon a contract, expressed or implied, that the trust shall be faithfully executed on the part of the bailee. As, if cloth be delivered, or (in our legal dialect) bailed, to a tailor to make a suit of clothes, he has it upon implied contract to render it again when made, and that in a workmanly manner. If money or goods be delivered to a common carrier, to convey from Oxford to London, he is under a contract in law to pay, or carry them, to the person appointed. If a horse, or other goods, be delivered to an innkeeper or his servants, he is bound to keep them safely, and restore them when his guest leaves the house. If a man takes in a horse, or other cattle, to graze and depasture in his grounds, which the law calls agistment, he takes them upon an implied contract to return them, on demand, to the owner" (II. 451). The contracts so embraced in this term will, where they have relation to commerce, be found treated under their respective designations. The term bailment is now generally used by legal writers, for the purpose of classifying the bailment is now generally used by legal writers, for the purpose of classifying the various contracts it embraces, with a view to a consideration of the proportionate responsibility of the bailee for the subject under his charge, according to the

nature of the bailment. The scale of responsibility generally approved of, is that adopted by Sir William Jones. He adopte the distinction of the civilians between outpa, culpa lata, and culpa levis, or "ordinary neglect," "gross neglect," and "slight neglect." These are thus distinguished:—
"ORDINARY neglect is the omission of that care, which every man of common prudence, and capable of governing a family, takes of his own concerns.

"Gross neglect is the want of that care, which every man of common sense, how institutions some: takes of his own property.

inattentice seever, takes of his own property.

"SLIGHT neglect is the omission of that diligence which very circumspect and thoughtful persons use in securing their own goods and chattels" (118, 119). The responsibility of the bailee, as measured by these definitions, has been thus applied

to the leading contracts comprehended under the term bailment

In Deposit, where the bailee becomes the gratuitous custodier of the goods, he is not in general liable for what may happen to them, unless a wilful carelessness, which must be presumed to evince fraud or malice, can be shown to have actuated him. If he be naturally careless, and allow his own property to run the same risk, the proprietor must bear any loss which may occur, as the consequence of having trusted a person of such habits with his property,—in this case, then, the bailee is

only answerable for gross neglect.

In Mandate, where the mandatory acts gratuitously, the same rule applies, with the difference applicable to the position of the bailee, who is not merely the passive custodier, but has undertaken to perform some act relative to the subject put into

his hands. He is not bound to exact diligence, and cannot be made responsible, unless for gross carelessness, as above (but see below, in the case of a hiring).

Commodate or loan for use, exacts the highest degree of care on the part of the borrower. The rule is, that the article lent perishes to the owner, but as it is intrusted to the borrower for his convenience, he will be liable in damages, if the large can in any way be stiributed to the absence of carting on his many way he stiributed to the absence of carting on his many way.

intrusted to the borrower for his convenience, he will be liable in damages, if the loss can in any way be attributed to the absence of caution on his part. A borrower or hirer is absolutely liable for the safety of the object, if he keep it beyond the time stipulated, or use it for a purpose different from that for which it was lent. Pledge, or Paum, being a contract for the mutual advantage of the bailor and bailee, exacts ordinary diligence. The subject, if it periah, perishes to the bailor, but he can make the bailee responsible if he has shown "ordinary neglect," or has not taken such care of it as a man usually takes of his own property. There are special statutory regulations for the responsibility of pawnbrokers. [Pawn-monkers] BROKERS.]

Location includes many contracts of great practical importance, such as the letting and hiring of moveables, the employment of manufacturers or artists to perform operations on subjects put into their hands, the employment of factors and perform operations on subjects put into their hands, the employment of factors and agents [Factor. Principal and Agent.], and the delivery of goods to carriers, shipowners, innkeepers, and others. The general rule in location is, that the bailer is liable for ordinary neglect, but special rules apply to the several contracts. Thus, from an early period, shipowners, carriers, and innkeepers, have been considered under an absolute obligation safely to restore all goods committed to their charge, no cause of deterioration exculpating them, unless it be occasioned by "the act of God or of the king's enemies;" there are, however, in special cases statutory limitations of such responsibility. For further information on this subject, reference must be made to the heads Carriers, Factor, Innkepper, Shipping, Wharpinger. In bailment, the bailor continues proprietor, but "a special qualified property" is transferred to the bailee, who being responsible to the bailor, has a right to maintain an action against any person injuring or abstracting the subject. (Blackstone, as above. Sir William Jones' Essay on the Law of Bailments.)

BAIZE, a coarse open woollen fabric, having a long nap, and sometimes friezed on one side. It is made at Chichester and Colchester, but principally at Rochdale.

BALACHONG, a kind of cake formed of dried fish, pounded up with salt and spices, and then allowed to ferment freely. The best sort, or the red bala-

spices, and then allowed to ferment freely. The best sort, or the red balachong, is made of shrimps. The black, or common sort, is made of other small fish. It is esteemed a great delicacy by the Malays and Chinese, with whom it forms an article of extensive commerce

BALANCE, the sum of money which must be added to one or the other side of an account, in order that the debits and credits may be balanced, or of equal amount. [BOOKKEEPING.]

BALANCE, OR BEAM AND SCALES, is a well-known instrument used for comparing weights with one another. When well-constructed, it must have the following properties:—lst, It should rest in a horizontal position when loaded with

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equal weights. 2d, It should have great sensibility, that is, the addition of a small weight in either scale should disturb the equilibrium. 3d, It should have great stability, that is, when disturbed, it should quickly return to a state of rest. That the first property may be obtained, the beam must have equal arms; and the centre of suspension must be higher than the centre of gravity. The second property, sensibility, is greater, in proportion to the length of the arm, the less the distance between these two centres, and the less the weight with which the balance is loaded. The third property, stability, is attained by making the centre of gravity of the whole apparatus fall below the point of support. The arm having a given length, additional weight either to the scale or beam is favourable to stability, and unsadditional weight either to the scale of beam is ravourable to sensibility. Every increase of sensibility (the arm remaining the same) is a decrease of stability, and vice verse. Stability in a balance is much less difficult to attain than sensibility. The scales of shopkeepers are sufficiently stable, but few are very sensible. Balances of great sensibility, however, are not suited for the ordinary purposes of business, as the process of weighing in such balances is generally tedious, owing to the slow vibrations of the beam. Balances used in is generally tedious, owing to the slow vibrations of the beam. Balances used in commerce are sometimes constructed either fraudulently or by inaccurate workmanship, so as to make unequal weights produce equilibrium,—an effect produced by making the arms of the balance, though apparently equal, really unequal. But an error of this kind is readily detected, by transposition of the weights, when, if the equilibrium be not preserved, the balance is fraudulent and useless. A balance for delicate purposes should be made as much as possible of brass, as steel and iron are apt to acquire magnetic properties.

BALANCE OF TRADE, a term sometimes employed to express the difference

between the commercial exports and imports of a state. This term was introduced, and has been chiefly used, by the supporters of the mercantile theory, a system of Political Economy which was based on the assumption, that "wealth consists of the Political Economy which was based on the assumption, that "wealth consists of the precious metals; that what is gained in trade by one nation must be lost by another; and that our great object in receiving returns should be to get money instead of merchandise." Hence, when the exports exceeded the imports, the state was said to have a favourable balance, and in the opposite case, an unfavourable balance; it being supposed that such balances could not be cancelled, except by the remittance of an equivalent amount of gold and silver, and that the money thus remitted was the measure of the gain or loss derived by the state from foreign trade. In order chiefly to bring about the desirable result of a favourable balance, restrictions and prohibitions were for many years imposed on the importation of nearly all commodities except bullion, while on the other hand bounties were granted on exportation. [Bounty.]

exportation. [Bounty.]

The selfish principle that what is gained in trade by one nation is lost by another, is now abandoned; it being obvious, that unless in the general case both parties are benefited, no exchange of commodities will take place. It is now also admitted, that the wealth of states and of individuals consists not in money alone, but in the abundance of their whole disposable products; that gold and silver are commodities subject to the same general rules in their transmission, as sugar, tobacco, or dities subject to the same general rules in their transmission, as sugar, tobacco, or any other commodities, namely, sent from where they are of lower, to where they are of higher value, and never exported except for the purpose of importing some more valuable article in return; that in the case of what is called an unfavourable balance, bullion is not exported unless it be at the time the cheapest exportable commodity; and that in point of fact its exportation (except from mining courtries), as well as its importation, can take place only to a limited extent. If bullion be largely exported, it will become scarce, and of course dear, in the exporting country; the money value of other commodities will in a proportionate degree fall; and they will become preferable objects of remittance and exportation notil bullion is again reimported. In a similar manner, if by the operation of a until bullion is again reimported. In a similar manner, if by the operation of a favourable balance, bullion is imported in greater quantity than is necessary to supply the wants of the country, its value will become depreciated in relation to other commodities, and it will be again re-exported. [EXCHANGE.]

The public accounts do not show correctly the amount of the exports and imports The public accounts do not show correctly the amount or the exports and imports of the country; the official, or custom-house rate of valuation, having been fixed so far back as 1696, when prices were altogether different from what they are now while the declared value furnished by the merchant applies solely to the exports. In 1839, the official value of the exports was, £110,198,716; and of the imports, £62,004,000; showing, according to this valuation, a balance of trade in favour of the United Kingdom, or an excess of exports above imports, to the extent of £48,194,716; It is manifest, however, that unless the imports of a merchant exceed his exports in value, his trade would be speedily abandoned; and as what is true in the case of the individual merchant must be equally true in the case of the community at large, it follows, that could the public accounts be kept with accuracy, they would show, instead of a greater amount of exports than of imports, a very considerable excess of the latter above the former.

considerable excess of the latter above the former. B
BALE, a bundle or parcel of goods, packed up for carriage.
BALKS, large beams of timber, such as are used in building.
BALLAST (Dan. Bagiast. Du. Ger. & Sw. Ballast. Fr. Lest. It. Savorra.
Sp. Lastre. Por. Lastro. Rus. Ballast), sand, iron, or any other heavy material employed for sinking a vessel to a proper depth in the water, and to give it a just counterpoise against the action of the wind on the sails. In ballasting a wassel, the centre of gravity should be placed neither too high nor too low. When vessel, the centre of gravity should be placed neither too high nor too low. When too much heavy ballast is deposited in the bottom of the hold, the vessel will be too stiff; she will roll violently, and besides having her sailing qualities impaired, will be in danger in bad weather of being dismasted. When, on the contrary, there is too little ballast, or this is so disposed as to raise the centre of gravity too high, the vessel will be too crank, and equal danger will arise. The art of ballasting, however, is to be acquired rather from experience than specific rules, as the quantity required by different vessels of the same tonnage varies according to their shape or build.

shape or build.

Vessels in ballast, i. e. having no goods on board other than the stores and other articles requisite for the ship, crew, and passengers, are exempt from the payment of certain port-charges which are levied upon vessels having cargoes; many formalities at the Custom-house are likewise dispensed with in favour of such vessels. A foreign vessel proceeding from a British port is considered as a ship in ballast, though having on board a small quantity of goods of British manufacture for the private use of the master and crew, and not as merchandies, provided such goods do not exceed in value £20 for the master, £10 for the mate, and £5 for each of the crew.

The ballasting of vessels in the Thannes is placed under the superintendence of the Corporation of the Trinity-house, in whom is vessed the soil of the river from London Britisp to the sea. Their charges are as follows:—

For land ballast from any quarries or pits east of Woolwich, 1d. per ton of 90 cwt. For river ballast, not washed, carried to any vessel employed in the coal-trade, is. per ton; carried to any torign vessel; is 7d. per ton. For washed ballast, double these rates are chargeable in each case respectively.

The following additional sums are also chargeable:—For each ton delivered in or unladen from the inward East or West India Dock, 10d.; in or from the outward East or West India Dock, the London Dock, the Commercial Dock, the East Country Dock, or the City, Surrey, or Regent's Canal, 4d.

London Dock, the Commercial Dock, the mass country area, we array, and the Const. 4d.

No ballast is to be put on board before entry at the Ballast-office, under a penalty of £5 per ton. The Trinity Corporation may recover a fine of £10 from any person, for every ton of ballast which he may take out of the river, within the limits above mentioned, without their authority. It is likewise ordered, that the ballast of all vessels coming into the Thames must be unladen into a lighter, the charge for which is 6d. per ton; and a penalty of £20 is levied from the master of any vessel from which ballast is cast into the river.

Similar regulations exist in most other ports. [For the oustom-house regulations as to vessels in ballast see Currons' Regulation Act, abridged, § 80-83.]

In ballast see Customs' Regulation Act, abridged, § 80-83.]

BALSAM (Fr. Baums. Ger. Balsom). Under this name are commonly included various medicinal resinous juices obtained from trees; but the term is strictly applicable only to such as contain benzoic acid, along with a volatile oil and resin; and of these true balsams there appear to be only five; namely, Balsam of Peru, Balsam of Tolu, Benzoin, Storax, and liquid Amber. There are besides the balsam of Gilead or Opobalsam, Copaiba, and others which contain no benzoic acid, but are turpentines containing a volatile oil and resin.

Balsam of Peru is procured from the Myrosylon Peruiferum, a tree which grows in the warmest parts of South America. It occurs in two states; one called the white, the other the black. The former, which results from spontaneous exudation, or incisions made in the bark, is very rare. The black or common balsam is said to be procured by boiling the bark and branches of the tree. It is a fluid, having the consistence of syrup, a brown colour, fragrant aromatic smell, and a pungent

the consistence of syrup, a brown colour, fragrant aromatic smell, and a pungent bitterish flavour. Sp. gr. 1'15. It is commonly imported in tin flacks. Both the white and the black balsams are extensively adulterated, chiefly with copaiba,

turpentines, or volatile oils.

Balsam of Tolu, or Dry White Balsam, is said to flow from incisions in the same tree (i); and when fresh, is of the consistence of a strong turpentine. It becomes tenacious with age, and in cold weather may be broken, but melts again in summer. It is a brownish-yellow or reddish-brown friable substance, of a pleasant smell like benzoin, and a weak aromatic somewhat acrid taste. Its adulteration with turpentine or resin is known by its odour when thrown on hot coals. is imported in jars or tin cases.

The balsams of Peru and Tolu are employed medicinally in the state of syrup or tincture, particularly in cough mixtures; their fragrance also renders them pleasant adjuncts to chocolate, liqueurs, and other articles. [Bendoux. Storax. Copaira.]

BAMBOO, a gigantic plant of the reed or grass kind, which grows luxuriantly in the tropical parts of Asia and America. It shoots up with great rapidity, and varies in height from 15 to nearly 100 feet. When full grown its general appearance is that of a straight rod with a number of stiff branches shooting at right angles from the main stem. It is of almost up versal near and is probably the most angles from the main stem. It is of almost universal use, and is probably the most valuable boon conferred by nature upon the inhabitants of warm climates. The young shoots of the plant are eaten like asparagus; when older, a fluid affording an agreeable beverage is secreted in the hollow joints; and the leaves and seed are used in medicine.

"No plant is more useful where a union of strength and lightness is required. In building it is so generally employed that the houses of the inferior classes in India are almost exclusively constructed of it. It is adapted to the formation of bridges, masts for boats, and almost every article of domestic furniture. Bedding and sacking, and even cordage are manufactured from it. It is the common fence for gardens and fields; and palanquins and light carriages are principally composed of it. The hollow stems serve for waterpipes, and in military operations in has often been resorted to for the construction of screens. Finally, according to Barrow, the Chinese find the bamboo invaluable for keeping the whole empire in due subordination through the medium of increases bastinading." (Edin. Cab. Lib., British India.)

BANANA, the fruit of the Musa paradisiaca, a valuable plant common in tropical countries. It very closely resembles the plantain [Plantain], but is generally shorter and rounder, with a pulp softer and of a more delicate taste.

shorter and rounder, with a pulp softer and of a more delicate taste.

The banana and plantain are to the inhabitants of the torrid some what corn is to Europe, and rice to the natives of India and China. Humboldt doubts with reason whether there is any other plant in the globe which, in so small a space of ground, can produce so great a mass of nutriment. Eight or nine months after the sucker has been inserted in the earth, it begins to form its clusters, and the fruit may be gathered in less than a year. A plantation is perpetuated without any other care than that of cutting the stems on which the fruit has ripened, and giving the earth a slight dressing. A spot of 1076 feet may contain at least from thirty to forty plants, which, in a year, will yield more than 4410 lbs. of nutritive substance. Humboldt also estimates that the produce of the banana is to that of wheat as 133:1, and to that of potatoes as 44:1. Numerous preparatious are made of this fruit, both before and after its maturity. When fully ripe, it is exposed to the sun, and preserved like our figs, forming an agreeable and wholesome food; while meal or flour is obtained from it by being cut into alices, dried, and pounded. It is calculated that the same extent of ground in Mexico on which the banana is raised, is capable of maintaining fifty individuals, whereas in Europe, under wheat, it would not fruit a substance for two; and nothing strikes a traveller more than the diminutive appearance of the spots under culture round a but which contains a numerous family (Humboldt's Travels, Edita Cab. 160.). The other parts of the plant are also useful. The leaves, which are more than two yards long, and a foot broad, are used for napkins and table-cloths, and are food for hogs. The water from the soft trunk is used as an astringent. In the Philippine Islands the fibrous bark of a wild banana, Musa textilis, is made into cloth, and also affords material for the cordage called in eastern countries Manilla ropes.

BANCO, an Italian word signifying Bank, u

BANCO, an Italian word signifying Bank, used for describing the bank money

of Hamburg and other places.

BANDANA, a kind of handkerchief with bright figures or spots upon a red or dark ground. India is the original seat of this manufacture; but the oriental patterns are now far surpassed in beauty and precision of design by the British. The term bandana is also applied to the style of calico-printing by which the patterns are produced.

BANK, a term sometimes applied to a depository for money, but most commonly to an establishment for dealing in money capital. The proprietor or manager of such an establishment is called a banker; and the term banking is generally used to express the rules and principles by which his operations are, or should be regulated, as well as these operations themselves.

I. HISTORICAL NOTICE.—Few records are preserved of the extent to which banking was known or practised by the ancients. The first bankers were the money dealers, who exchanged the coins of one nation for those of another. In Athens and Rome bankers are said to have existed who fulfilled many of the modern functions of the trade: but the prejudice against the taking of interest for money. and frome bankers are said to nave existed who fulfilled many of the modern functions of the trade; but the prejudice against the taking of interest for money, rendered the business one of little repute. The barbarism of the middle ages left no field open for banking. In the twelfth century, however, the revival of commerce in Italy again created the necessity for the employment of bankers. These at first were Lombard Jews, who exchanged money and bills in the public market-places on benches, whence the term bank, from bance, the Italian word for bench. The modern public banks were originally deposit-banks. The first was the celebrated Bank of Venice, instituted in 1171. Its capital was composed of a loan advanced to the state, which was made transferable in the books of the bank. It opened accounts with depositors of gold, silver, and jewellery, giving them credit for the value of the effects deposited. The holders of such credits were said to be the holders of so much bank money; and it was made obligatory upon the merchants to make their contracts and draw their bills in this money, the payments being effected by a transfer from one name to another in the bank accounts of the funds deposited in its offers. In 1587, its capital was above five millions of ducats. This bank continued to prosper until the subversion of the republic in 1797; and its money at all times bore an agio over the current money of the city: in 1808 it was discontinued. The banks of Barcelona and Genos were founded in the fourteenth century. In 1609, the well-known Bank of Amsterdam was established, and shortly afterwards, in 1619, the Bank of Hamburg, both banks of deposit, on the model of that of Venice. The other continental banks are of much more recent formation.

In England, the Jews, famous during the middle ages for "their egregious cunning in trade," were the principal money dealers until the thirteenth century, when this branch of business was shared by a number of Lombard Italians who then settled in the country. The business of banking, however, in the modern sense of the term, is comparatively of recent date. In London, the merchants lodged their money for security in the Tower, whence they drew it out as occasion required; but in 1640, Charles I. having seized £200,000 thus deposited, they appear to have afterwards employed the goldsmiths as their depositaries. The London goldsmiths, whose money trade had previously been confined to the changing of coins, then extended their business by borrowing and lending on interest; and the modern bank notes. The extension of commerce which occurred about half a century later, after the settlement of the government of the Revolution, led to the institution of the Bank of England, the Bank of Scotland, and in time to other establishments in the manner afterwards described.

II. OBJECTS AND PRINCIPLES OF BANKING.—These will be best explained by first considering separately the principal purposes of a bank, namely, receiving deposits, facilitating remittances, issuing paper money, and making loans, and afterwards showing the general effect of these operations when combined; in each case having regard chiefly to the mode in which banking is usually conducted in the United

Kingdom.

Deposits.—The banks first instituted in Europe after the revival of commerce were, as already noticed, established for the purpose of receiving deposits. The lodgements consisted of coin of full weight, or an equivalent amount of bullion; and the credits raised in the bank books for such deposits were transferred in payment of debts from one account to another by means of drafts or cheques; the coin or bullion being seldem or never withdrawn, except when required for exportation. No interest was allowed on the deposits; and the advantages derived from such banks consisted in the safe custody of the precious metals, in the facility and despatch given to cash transactions by the transfer system, and in the certainty afforded that these transactions would be adjusted in currency of a determinate and invariable standard, instead of the light and debased coins then in circulation. This mode of banking is still continued in Hamburg, under which head it is more fully explained. But in the United Kingdom the receiving of deposits is invariably conjoined with other departments of banking business; and the general condition of the circulating medium renders bullion lodgements unnecessary. Deposit banking, as thus modified, still furnishes to the public the advantages of scurre system; besides which, interest, varying from about two to three per cent., is (except by the private bankers of London) generally allowed on the sums in their hands, from the readiness with which they can be reinvested by the banks in securities yielding a higher rate. Deposits in this country are, however, of two kinds: Dead Accounts (distinguished in Scotland as Deposit Receipts), in which money is invested for the purposes of security and interest without being operated upon; and Drawing Accounts, called also Running, Operating, or Current Accounts, in which there is a perpetual paying in and drawing out by cheques or otherwise, according to the circumstances or necessities of the depositor, interest being allowed on the daily balances in the h

Remittances were, in ancient times, effected by sending a messenger with the coin, and in the middle ages by means of bills of exchange. The latter still form the chief

vehicle for foreign remittances; but the transmission of money from one part of the kingdom to another is now almost entirely effected by the banks, by whom it is conducted with great security and despatch, through the medium of their agents or their branches. These facilities encourage trade in two ways: - First, by causing money to be transmitted in a shorter space of time, capital is made to revolve more rapidly; and, secondly, they diminish the prices of commodities, operating like improved roads in lowering the expense of their conveyance. The most common form of effecting an inland remittance is that of a Letter of Credit, which authorizes the bank's correspondent to repay the money deposited with them to the party named in the letter; the use of the money during the intervening period and sometimes a small commission, forming the remnneration to the bank. [EXCHANGE]

named in the letter; the use of the money during the intervening period and sometimes a small commission, forming the remuneration to the bank. [EXCHANGE.]

Circulation.—The issue of paper money in the form of notes payable to the bearer on demand, is, in reference to the public, perhaps the most important of the functions of a bank; but a disturbing element is attached to it from the circumstance of its being profitable according to the proportion in which the amount of notes that is kept in circulation exceeds the amount of capital which is kept in reserve for the payment of them. It is, however, generally admitted, that banks of issue are capable of conferring valuable benefits upon a country when they are properly conducted, their operations confined to the legitimate objects of banking, and their liability to comply with their contracts strictly enforced. The principal check upon the overissues of banks is the convertibility of their notes into specie on demand. That tendency is also limited on the one hand by the wants of the public, on the other by the desire of the banks to protect their own interest; as the issue of on the other by the desire of the banks to protect their own interest; as the issue of notes will be either in the repayment of deposits, or in the form of loans by discounts or otherwise. Farther checks exist in the system of bank exchanges, by which the notes circulated by one establishment are intercepted by the others and brought back to it; and by the practice of allowing interest on deposits, under the influence of which the notes not necessary in trade are returned for the purpose of

investment. [Money.]

Loans may be classed under three heads: lst, Discounts; 2d, Cash-credits; 3d, Overdrafts on Current Accounts:—

1. Discounts. The form in which loans are chiefly made by bankers is on the security of bills of exchange, which are well adapted for their purposes, as having only a short time to run before they fall due, the advanced capital soon returns, while, being transferable, they can, if necessary, be rediscounted. The advance is made to the full amount of the bill under deduction of interest, or as it is somewhat loans! termed discount. for the time which the bill has to run; a commission what loosely termed discount, for the time which the bill has to run; a commission is also sometimes charged, varying from one-fourth to one-eighth per cent.

"The bills presented to a bank for discount," says Mr Gilbart, "may generally be divided into

"The bills presented to a bank for discount," says Mr Gilbart, "may generally be divided into the following classes:—
"(1.) Bills drawn by producers or manufacturers upon wholesale dealers.
"(2.) Bills drawn by wholesale dealers upon consumers.
"(3.) Bills drawn by retail dealers upon consumers.
"(4.) Bills drawn by retail dealers upon consumers.
"(5.) Bills drawn by retail dealers upon consumers.
"(6.) Kites or accommodation bills.
"The first two classes of bills are the best, and are fair legitimate bills for bankers to discount. The third class ought not to be too much encouraged. They are for comparatively small amounts, and are drawn by shopkeepers and tradesmen upon their customers. To discount these bills freely would encourage extravagance in the acceptors; and ultimately prove injurious to the drawers. When a man accepts bills to his butcher, baker, tailor, or upholsterer, he may fairly be suspected of tiving beyond his income. Solvent and regular people pay their tradesmen's accounts with ready money. The fourth class of bills, though sometimes proper, ought not to be too much encouraged. Persons out of trade have no business with bills. The last class of bills should almost always be rejected. To an experienced banker, who knows the parties, the discovery of accommodation bills is by no means difficult. They are usually drawn for even amounts, for the largest sum that the stamp will bear, and for the longest term that the bank will discount, and are presented for discount soon after they are drawn. The parties are often relations, friends, or parties who, from their avocations, can have no dealings with each other." (History and Prisciples of Banking, p. 156.)

The length of the period which bills have to run is also matter of consideration. The principal advantages to a bank of short dated bills compared with long dated bills are the following:—There is more safety in discounting short bills, because the parties may fail before the long ones fall due: The commission (where this is charged) will be m

BAN 48 BAN

price will advance before the long bills which he accepts in payment shall fall due; while if the bills are of short date this will be prevented. (Ibid. p. 186.)

Besides discounting bills the banks render important services in attending to

- Besides discounting bills the banks render important services in attending to their due negotiation; it being customary for merchants and other people to send all the bills and drafts payable to them to their bankers, who become responsible for their regular presentation for payment, and for their noting if not paid.

 2. A Cash-credit is an undertaking on the part of a bank to advance to an individual such sums of money as he may from time to time require, not exceeding in the whole a certain definite amount, for repayment of which he enters into a bond with securities. Cash-credits are granted not only upon personal security, but also upon the security of stock in the Public Funds, also occasionally of lands or houses, and by some joint-stock banks on the security of their own shares. To those requiring temporary advances of money, cash-credits possess the following those requiring temporary advances of money, cash-credits possess the following advantages over discounts:—The party can repay any part of the sum drawn at pleasure, and interest is charged only for the money actually employed: He has also the power of drawing whenever he pleases to the full amount of his credit; whereas, in the case of discounting bills, he must make a new application to the bank for each bill. To a bank the comparative advantages of a cash-credit in respect to bills, consist chiefly in its connecting the party more intimately with the bank; in the summary mode in which the bond may be recovered from the party or his securities; while to a bank issuing notes, the frequent operations under the credit gives activity to its circulation. On the other hand, their comparative disadvantages to a bank are as follows: vantages to a bank are as follows :
- vantages to a Dank are as 10100WS:

 "(1.) Cash-credits, when once granted, cannot be called up, but bills of exchange soon fall due, and you can refuse to discount again. (2.) If you discount bills of exchange, they can be rediscounted to supply the bank with funds if necessary, but advances on cash-credits cannot be replaced. (3.) In case of a panic or a run upon the bank, the persons having cash-credits might have occasion to draw upon the bank, and the notes would immediately be returned upon the bank, for payment in gold; but you could refuse to discount bills of exchange until the run was over." (Gilbert, p. 177.)

 The cash-credit system was first introduced in Scotland, to which part of the United Kingdom it is still chiefly confined.

s. Overdrafts on Current or Deposit Accounts. These are stated under a separate head, because in England the advances in this way are considerable. They are similar in character to the drafts under a cash-credit, with this difference, that in a current account the party overdraws on his own individual security, and that on each occasion he has to obtain the permission of the bank. In advancing money, whether by discounting bills of exchange or otherwise, a bank receives only the market rate of interest. But as this is a return which may be obtained for money without incurring the expense of an establishment for the purpose, it is obvious that no one would invest capital in the business of banking were to the confined to the loan department alone. The main object of the banker, howit to be confined to the loan department alone. The main object of the banker, howit to be confined to the loan department alone. The main object of the banker, however, is to procure, and employ on an advantageous footing, the money of other people, and his profits are nearly in proportion to the extent to which he can accomplish that object. The trading capital of a bank consists of—let, The capital contributed by the partners; 2d, The money lodged on deposit; and 3d, The money deposited for the purpose of remittance; to which falls to be added in the case of banks of issue, 4th, The amount of notes in circulation. These means are employed in—let, Discounting bills of exchange: 2d, Advances on cash-oredits, or overdrawn accounts; and, 3d, Investments in the funds and other public securities. The surplus of the former above the latter forms the reserve kept by the bank to meet current demands. The amount of reserve necessary in ordinary circummeet current demands. The amount of reserve necessary in ordinary circummeet current demands. The amount of reserve necessary in ordinary arcumstances is to be estimated from experience, and the transactions and position of the bank; but as unforeseen events may occur which may render the bank liable to be called upon for the whole or a considerable proportion of its liabilities, whether in the shape of deposits or notes in circulation, it is of consequence that the amount of trading capital arising from these sources should be invested in securities which shall rapidly revolve, and be at all times convertible. The securities which shall replied requires are high fact to the nublic funds. which best fulfil these requisites are bills of exchange, stock in the public funds, and exchequer bills, on which a bank can easily extend or diminish its advances in proportion to the capital which it may have to employ; increasing them when the deposits and circulation are increasing, and diminishing them when these are diminishing; while in anticipation of a run, the bills may be converted into money by being rediscounted, and the stock and exchequer bills sold. Investments on securities not readily convertible cannot be made with safety except out of the capital belonging to the bank itself.

Banking establishments are constituted in various ways. On the continent, the public banks are, in general, more or less connected with the government. In the United States they are chiefly joint-stock companies, with charters limiting the responsibility of the partners to the amount of their shares, or some fixed multiple responsibility of the partners to the amount of their shares, or some fixed multiple thereof. In this country the banks are constituted in three ways:—lst, Chartered ones invested with certain privileges of monopoly,—as the Bank of England, and the Bank of Ireland; 2d, Joint-stock banks established on the principle of unlimited responsibility; and 3d, Private banks. The joint-stock and private banks again differ in some respects in their privileges and methods of transacting business, according as they are situated in London, in the provincial parts of England, in Scotland, or in Ireland.

land, in Scotland, or in Ireland.

III. The Bank of England was established in 1694 as a bank of issue, deposit, and loan, under the title of the Governor and Company of the Bank of England. Its original capital of £1,200,000 was lent to government at 8 per cent. interest, with a further allowance of £4000 a-year for management. According to the statement of the projector, William Paterson, "the crection of this famous bank not only relieved the ministerial managers from their frequent processions into the city for borrowing meney on the best and nearest public securities at an interest of 10 and 12 per cent. per annum, but likewise gave life and currency to double or triple the value of its capital in other branches of public credit." The charter was granted for a limited time; but it was renewed at different periods, some advantage being given after each interval by the bank to the public in the shape of an advance of money at a low rate of interest, or without any interest. The capital was increased by new subscriptions in 1708 to £5,559,995; in 1722 to £8,959,995; in 1742 to £9,800,000; in 1746 to £10,780,000; and in 1752 to £11,642,400; lastly, by a bonus of 25 per cent. in 1816 to £14,553,000; the whole of which, as it was raised, was lent to the government.

In 1708 an act was passed prohibiting all other banks of issue in England con-

was lent to the government.

In 1708 an act was passed prohibiting all other banks of issue in England consisting of more than six partners; and this statute having been construed so as to apply to banks of all descriptions, the Bank of England remained the only joint-stock one in England until it was partially repealed in the year 1826.

In 1696 the bank became involved in difficulties, and was obliged to suspend payment of its notes; but was shortly afterwards relieved by the assistance of the government. No similar embarrassment occurred until the early part of the late war with France, when commercial difficulties, caused by the transition from peace to a state of hostility, an unfavourable state of the exchanges arising from a deficient harvest foreign subsidies, and above all a general dread of invasion produced so harvest, foreign subsidies, and, above all, a general dread of invasion produced so great a drain for specie, that on Saturday the 25th February 1797, only £1,270,000 of treasure remained in the coffers of the bank. A further drain being apprehended, an order in council was issued next day by the ministers, prohibiting the directors from paying their notes in specie until the sense of Parliament could be taken. Shortly afterwards, the memorable Bank Restriction Act was passed, exempting the bank from paying in cash, and authorizing it to issue notes for £1 and £2 in

This measure placed the currency of the country under circumstances wholly dis-similar to those that have attended it either before or since. The events of the war, particularly during the seven years that preceded the peace of Paris, opposed greater obstacles to the prosecution of our foreign trade than were ever at any other time put into action, whence gold and silver became the only articles which could be safely taken in exchange for the goods of which we were purchasers from the continent. These metals, especially gold, were besides greatly in demand for the pay of troops. These circumstances, acting in conjunction with the tendency of the Bank Restriction Act, under which the directors were relieved from the dangers that would otherwise have attended an undue expansion of their issues, caused such an enhancement of the prices of the precious metals, when measured by the paper-currency, as forced all our gold coin out of circulation. The difference in value of Bank of hancement of the prices of the precious metals, when measured by the paper-currency, as forced all our gold coin out of circulation. The difference in value of Bank of England notes and gold, estimated at the Mint price, was for some time trifling, and from 1803 to 1808 was no more than £2:18:2 per cent. But in the seven following years, that excess in value of gold was raised in the following degrees:—1809, £14:7:7 per cent.; 1810, £8:7:8 per cent.; 1811, £20:2:7 per cent.; 1812, £25:16:8 per cent.; 1818, £29:4:1 per cent.; 1814, £14:7:7 per cent.; 1815, £13:9:6 per cent. The fall in the price of gold which occurred in 1814 was brought about by the return to peace, which restored trade to its natural channels; and it was afterwards reduced to its Mint price by the contraction of issues forced upon the bank by Parliament. upon the bank by Parliament.

BAN

The Bank Restriction Act had provided for the return to specie payments within six months after the signature of a treaty of peace; but, at the peace of Amiens in 1802, this was postponed for a year, on account of the serious inconvenience it would 1802, this was postponed for a year, on account of the serious inconvenience it would then have caused to trade; and after the rupture in 1803, the public called loudly for a continuance of the exemption. At the close of the war in 1815 an act was passed, declaring in the preamble that "it was highly desirable that the Bank of England should return as soon as possible to the payment of its notes in cash." The year following, however (1816), being one of commercial distress, the resumption of cash payments was postponed to July 1, 1818; and by a further act to July 1, 1810. In the last mentioned year a committee of the Hence of Commons was a page. 819. In the last mentioned year a committee of the House of Commons was ap-cointed to inquire into the subject generally, of which committee Mr (now Sir pointed to inquire into the subject generally, of which committee Mr (now Sir Robert) Peel was chairman; and upon the recommendation of their Report the celebrated act (59 Geo. III. c. 49), sometimes called *Peel's Act*, was passed, requiring the Bank after February 1, 1820, to exchange their paper for bullion at certain fixed and graduated prices, and on May 1, 1823, to pay in current gold coin at the Mint rate of £3:17:10½ per ounce: the latter provision was anticipated in point of time by the bank recommencing payment of their notes in coin on May 1, 1821.

Renewed Charter, August 29, 1833 (3 & 4 Wm. IV. c. 98). The following is a summary of the provisions of this act:—

Section 1. The Bank of England declared to have the exclusive privilege of banking upon the conditions specified in the act.

Section 2. During such privilege, no Company of more than six persons to issue notes payable on demand within London, or sixty-five miles thereof,—but banks beyond that limit may issue bills and notes payable on demand, or otherwise, at the place at which the same shall be issued, and also in London; but no such bill or note shall be under £5, or be reissued in London, or within sixty-five miles.

Section 3. Any Company of the state of the same shall be under £5.

Section 3. Any Company of more than six may carry on banking in London, or within sixty-five miles, provided it do not issue its bills or notes payable on demand, or at any less time than six months.

months.

Section 4. All notes of the Bank of Engiand payable on demand, or at any sees time than air months.

Section 5. The exclusive privileges of the bank may be terminated upon a year's notice given within six months after August 1, 1845, and repayment of the public debt.

Section 5. The exclusive privileges of the bank may be terminated upon a year's notice given within six months after August 1, 1845, and repayment of the public debt.

Section 6. Rank of Engiand notes are a legal tender (except with respect to the bank itself) so long as the bank shall pay such notes in coin.

Section 7. Bills not having more than three months to run not subject to the usury laws. [This period has since, by temporary acts, been extended to twelve months.]

Section 8. Accounts of bullion, and of notes in circulation, to be sent weekly to the Chancellor of the Exchequer; and an average state of the bank accounts of the preceding three months shall be published every month in the London Gasette.

Section 9. Public to repay the bank one-fourth part of the debt of £14,686,500.

Section 10. If the proprietors shall so determine, the capital stock of the bank shall be reduced from £14,683,000 to £10,914,780; and the difference shall be divided amongst them on October 5, 1834.

Sections 11. 12. Provide for the qualification of directors in the event of the said reduction of stock being made.

Section 13. Benk to deduct £190,000 per amum from sum allowed for management of national

ock being made. Section 13. Bank to deduct £190,000 per amum from sum allowed for management of national

Section 14. Provisions of 39 & 40 Geo. III. to remain in force, except as altered by this act, subject to redemption upon the terms following:—that at any time, upon twelve months' notice, to be given after August 1, 1858, and upon repayment of the public debt, then the said exclusive privileges of banking shall cease and determine.

Capital and Nature of Business.—The repayment of one-fourth of the debt due by the public to the bank was made by an assignment of 3 per cent. stock from the Commissioners for the reduction of the National Debt; but the proprietors have allowed this sum to remain as available capital in the hands of the directors. Hence the stock of the bank, sometimes called its permanent capital, still amounts to £14,553,000, upon which sum the dividend is paid to the proprietors. The real capital of the bank however exceeds this sum by £2,944,000, the amount of the undivided profits, or rest, at 31st March 1840; making its total amount £17,497,000. The permanent capital is transferable like government stock: and its value fluctuates divided profits, or rest, at 31st March 1840; making its total amount £17,497,000. The permanent capital is transferable like government stock; and its value fourtuates from political causes, as well as from the value of money, and the supposed success of the Company. It is exempted from taxes, accounted personal estate, assignable by unstamped transfer, and not subject to forfeiture, or liable to be taken in execution. The disposable capital under the management of the directors consists of the amount raised by the issue of notes, that held by deposit from government and private parties, and, lastly, undivided profits. The sum of the whole is generally about £30,000,000, of which part is vested in coin and bullion, but a larger part in securities producing interest—such as Exchequer bills and mercantile acceptances. The income of the bank is derived from interest on government securities, discount on mercantile bills, allowance for managing the public debt, profits on bullion, and agency, amounting altogether to about £1,600,000, which, after deduction of salaries, losses, and duty on notes, forms the fund divisible among the proprietors. The bank is prohibited from engaging in any commercial undertaking other than its legitimate operations, such as the buying and selling of coin or bullion, and bills of exchange. Being, however, authorized, like the Banks of Amsterdam and Hamburg, to make advances on the security of merchandise lodged with it, or pledged to it by written documents, a power is given to the directors to sell the same for their resimpursement. ame for their reimbursement.

pleaged to it by written accuments, a power is given to one directors we sent are same for their reimbursement.

Management and Internal Regulations.—The chief management is vested in a Governor, Deputy-Governor, and twenty-four Directors elected annually; thirteen or more, of which the governor or deputy-governor must always be one, constitute a court. A governor requires to be possessed of £4000 or upwards of the stock, a deputy-governor £3000, a director £2000, and every elector £500. The directors seldom possess more stock than what is necessary to qualify them for their office. Four general courts of proprietors are held annually, namely, in March or April, July, September, and December. The purpose of these meetings is to make or revise by-laws, to determine questions relating to the institution, and to elect officers—this last usually taking place at the first meeting. Special meetings can be convened at the request of nine or more proprietors qualified as electors.

No account can be opened with the establishment without permission from the directors. If this be granted the bank will then discount approved bills, and receive and pay cash as ordinary bankers; but no deposit-account can be opened with less than £500. No interest is allowed by the bank. The party keeping an account must always have a sum at his credit; and no account is allowed to be overdrawn. Bills or notes (having not more than 95 days to run) including town bills, are now discounted every day instead of once a-week as formerly. But it is a general rule of the bank not to open discounts to such issuing bodies to the extent that may be required to discharge their notes paid into the several branches, and also records and paid in the college. that may be required to discharge their notes paid into the several branches, and also gives some facilities of a similar kind to banks which afford aid in the collection of the revenue at the time, and to the extent of the aid given. (Mr G. W. Norman's Evidence, 1840; Bank Report, p. 209.)

A committee of three directors sit daily, and on Thursday the whole court assembles. No important measure is adopted without the assent of the majority of

the court; and on particular occasions the directors communicate with the government. These communications are made to the First Lord of the Treasury and verments. These communications are made to the Chancellor of Exchequer, whose opinions are always considered with attention; but they possess no authority for enforcing any change in the bank's arrangements. The bank's business is divided into two departments; the one under the chief

The bank's business is divided into two departments; the one under the chief cashier, who transacts the receipts and payments, and issues the notes; the other under the general accountant, who posts these notes as they are issued or paid off, and manages the affairs of the national debt. In 1832 there were employed at the bank 320 clerks and porters, and 38 printers and engravers; and there were also 193 pensioners, chiefly superannuated clerks, who received in pensions £31,243, averaging £161 to each. In the same year the salaries and pensions amounted to £218,003; the house expenses to £39,187; the allowance of the directors was £8000; and the rent of the building was set down at £40,000. The salaries of the officers at the branches amounted to £25,000.

Transactions with Government.—The bank, besides lodging its capital with government, in consideration of the exclusive privileges granted to it, and as a security to the public for payment of its notes, has always performed the ordinary functions of a banker to the state. Since the renewal of the charter in 1833, one-fourth of the permanent debt has been repaid, and been thus reduced from £14,686,800 to £11,015,100, upon which interest is at present paid to the bank at the rate of 3 per cent. The bank has, however, been always in the practice of making other considerable advances to government, chiefly in the form of Exchequer bills. Before the exemption from cash-payments in 1797, these advances averaged

making other considerable advances to government, chieff in the form of Exchequer bills. Before the exemption from cash-payments in 1797, these advances averaged about £8,000,000; but after that time they increased very considerably, and the general amount in the ten years from 1807 to 1817 was £22,000,000. At present they consist partly of Exchequer bills, but chiefly of a sum of £10,897,880 lent in 1823, to relieve the public finances of the heavy payments on account of the half-pay and pensions due to retired officers, called the "dead weight," the consideration granted to the bank, being an annuity of £585,740 for forty-four years until 1867.

The bank acts as the organ of government in paying the dividends on the na-

tional debt, and in receiving and registering transfers of stock from one public ereditor to another; employing in this department about 400 persons. For this service it receives at present about £130,000 yearly. It likewise renders to the Treasury and other public offices, in daily receiving and paying money, the same services as a private banking house does to its customers. During the late war, ewing to the large amount of taxes and loans raised for the public service, the balances at the credit of the different government offices amounted to very considerable sums, at one time even so large as £11,000,000; in consideration of which the bank agreed to lend government £3,000,000 without interest. At present the public deposits fluctuate commonly between three and four millions, upon which no interest is allowed.

Deposits by Private Parties .--These generally varied from one to two millions until the panic of December 1825; but after that time they increased very considerably, and of late years have fluctuated from about four to twelve millions. Even this last sum, however, is comparatively small, arising from the fact that the bank directors do not give the same facilities to their customers as is received from pri-

vate bankers.

Demunt of Mercantile Bills.—The bills discounted have varied greatly in amount. When the rate of interest charged by the bank is on a level with the market rate, the number is large, but the reverse when it exceeds that rate. In 1809 and 1810, the average amount of discounts was about seventeen millions. 1809 and 1810, the average amount of discounts was about seventeen millions. Since the peace, it has seldom exceeded three millions, in consequence of the abundance of money possessed by private bankers, and their charge being commonly lower than that of the other, which is therefore chiefly resorted to for discounts during periods of commercial embarrassment. The annual average of loss by bad debts on discounts was, from 1795 to 1831, both inclusive, £31,696.

Circulation and Regulation of Issues.—No notes under £20 were put into circulation by the bank prior to 1759, in which year notes for £10 were first issued. In 1793 the bank born to issue notes for £5 and £1 and £2 notes were introduced.

1793, the bank began to issue notes for £5, and £1 and £2 notes were introduced in March 1797, after the bank suspended payment in specie. The issue of the latter, except for a short period at the end of 1825, ceased in 1821; and since the 5th April 1829, no bank in England can issue any note under £5 (7 Geo. IV. c. 6). The paper circulated by the bank at present consists of ordinary notes for £5 and upwards, and of bank post bills, drawn commonly at seven days' sight. The amount of the whole is generally about £18,000,000. In 1833 it was estimated that about three-fourths of the bank's paper money circulated in the metropolitan district; the remaining fourth in the country, particularly Lancachire.

The bank issues are understood to be regulated on the principle that the circulation should be at all times kept full, but without any redundancy, and the means by which this condition of things may be adjusted are, except on extraordinary emergencies, held to be indicated by the state of the foreign exchanges. In the exercise of their powers, however, the directors commonly act with caution. They are aware that under any circumstances a diminution of the currency is unfavourable 1793, the bank began to issue notes for £5, and £1 and £2 notes were introduced

are aware that under any circumstances a diminution of the currency is unfavourable are aware that under any circumstances a diminution of the currency is unfavourable to trade, lowering the price of commodities, and producing a general dulness in markets. When the foreign exchanges are likely to fall, and it appears incumbent on the bank to contract its issues, the directors prefess not to act on epinion, but to wait until an actual demand for gold has been made on the bank. Even then they do not make a direct contraction of their circulation; they merely ferbear to issue notes in the place of those which have been returned by the public for gold. The contraction of the circulation is usually effected by raising the rate of discount for bills, sometimes also by the sale of public or other securities; an opposite procedure leads of course to an expansion of it.

for bills, sometimes also by the sale of public or other securities; an opposite procedure leads of course to an expansion of it.

The bullion, or cash reserve, kept by the bank consists chiefly of gold,—silver seldom exceeding one-fifteenth of the whole. The common rule of the directors is to keep in treasure a sum equal to one-third of their liabilities. This proportion has usually been found sufficient; but the rule is not founded on general principles, and is not closely followed. In ordinary times, and when under a vigilant management, the circulation is limited within the amount which would injuriously affect the foreign exchanges, so large a proportion as one-third cannot be necessary. On the other hand, when by an overissue of paper, prices have been raised so high that gold has become the most profitable commodity for exportation, the experience of the bank has shown that the drain thus arising may be carried to an extent far exceeding the amount necessary to restore the equilibrium of the currency; while in a commercial panic, more especially when aggravated by a political disturbance, it is difficult to say what quantity of treasure would be found

adequate short of the amount of the bank's whole liabilities. With the view, howto sale in the stock exchange. This is the case not only with exchequer bills and government stock, but with the greatest of all their assets, the annuity on the dead weight, which might, if necessary, be divided or subdivided into portions fitted for the money market.

Branch Banks were first established by the directors in 1826, at the suggestion, it was said, of the late Lord Liverpool, and for the purpose of lessening the inconvenience arising from the frequent discredit of the country banks. The business of venience arising from the frequent discredit of the country banks. The business of these branches principally consists in discounting bills, issuing notes which are payable in London and in the place where they are issued, and in transmitting money to and from the capital. The towns in which they are established are as follows:—Birmingham, Bristol, Gloucester, Hull, Leeds, Liverpool, Manchester, Newcastle-on-Tyne, Norwich, Swansea, Portsmouth, and Plymouth. The managers of the branch banks allow no interest on deposits, nor do they permit any one to overdraw his account; the regulations under which they act having been framed so as to avoid interfering with the business of the local banks. The branches further consult the convenience of these banks by receiving gold from those who happen to hold more than they require, and in supplying it to those who stand in need of it. They also lend Bank of England notes to such as think fit to use them instead of their own, by discounting their bills at 3 per cent. interest. The branches were not expected to be productive of profit to the Bank of England, nor have they proved so.

were not expected to be productive of profit to the Bank of England, nor have they proved so.

The Profits of the Bank have in general been steady, though, at least in former times, seldom exceeding a certain moderate limit. In 1694 the dividend was 8 per cent.; and in 1695, 9 per cent. From that year to 1729, it fluctuated between 5½ and 9 per cent. From 1729 to 1747, the rate was 5½ to 6 per cent. from 1747 to 1753, 5 per cent.; in 1753 it fell to ½ per cent. After 1767 the dividend was gradually raised to 7 per cent.at which rate it continued till 1805. Before the latter period, however, the exemption of cash-payments in 1797 had increased the income of the bank in two ways; by extending its circulation, and by saving it the interest sacrificed till then in keeping a stock of bullion. Of the additional profits thus derived, 57½ per cent. was distributed among the proprietors in the form of bonuses, as fellows:—10 per cent. in 1895, and 5 per cent. in 1801, 2½ per cent. in 1802, 5 per cent. in 1804, 5 per cent. in 1805, and 5 per cent. in 1806. These making 32½ per cent. were paid to the proprietors; and in 1816, an additional 25 per cent was prital from £11,642,400 to £14,553,000. Besides these extra allowances, the bank's ordinary dividend was increased in 1805 from 7 to 12 per cent. which rate was paid in 1805 and 1806. In 1807, it was reduced to 10 per cent. which rate was paid in 1805 and the resumption of cash payments, it was further reduced to 8 per cent. In 1839, a still further reduction was made to 7 per cent., at which rate it has since continued.

The Rest, or Surplus of Undivided Profits, was about £3,000,000 until 1797, after which it increased madually to cicht willing and led in 1816 the above were which the continued or the street was paid to the continued.

The Rest, or Surplus of Undivided Profits, was about £3,000,000 until 1797, after which it increased gradually to eight millions, and led in 1816 to the above mentioned bonus of 25 per cent. It was further reduced in 1817 and 1818 by the expense incurred by the bank in procuring gold from abroad. Its general progress is shown in the annexed statement, from which it will be seen that its present amount

is nearly £3,000,000.
Accounts.—The pr

-The practice of the Bank of England in former times, like the banks of Accounts.—The practice of the Bank of England in former times, like the banks of Venice and Amsterdam, was to observe strict secrecy in regard to its accounts, considering this as important to its prosperity. After 1797, the directors reported regularly to government the amount of notes in circulation, which was afterwards published in the newspapers; but every thing else was kept secret until 1832, when the Report of the Parliamentary Committee on bank affairs gave to the public much information which, until then, had been considered confidential. Of the accounts then published, there is given below a State of its Liabilities, Assets, and Rest, for a series of years since 1780, with continuation, adding for each quarter, commencing with 1834, a statement of the average amount of the Issues, Deposits, Securities, and Bullion of the bank, according to the accounts which the directors are now required to publish in the London Gazette, in terms of act 3 & 4 Wm. IV. c. 98.

Account of the Liabilities, Assets, and Rest or Amount, of Undivided Profits of the Bank of England in the following years:—

				Liabilities.			Assets.		l _
			Circu	lation.		Secu	rities,		Rest or undivided
			Notes under L.S.	Other Notes & Post Bills.	Deposits.	Public Private.		Bullion.	Profits.
		_	£	£	£ 4,723,890	£	£	£	£
1780 1785	Feb.	29 28	:: ::	8,410,790 5,923,090	4,723,890 6,669,160	9,145,659 7,198,564	1,755,371 4,973,996	3,881,060 2,740,890	1,347,410 2,321,000
1790	••	20	:: ::	10,040,540	6,223,270	8,347,387	1,984,733	8,633,000	2,701,310
1791	•••			11,439,900	6,364,350	10,380,358	2,222,242	7,869,410	2,668,3 00
1792 1793	••	29 28	:: ::	11,307,380 11,888,910	5,523,370 5,346,450	9,930,799 9,549,209	3,129,761 6,456,041	6,468,060 4,010,680	2,705,870 2,780,570
1794	::			10.744.020	7,891,810	9,950,756 13,164,172	6,456,041 4,573,794	6,987,110	2,875,830
1795	••	29		14,017,510	0,973,090	13,164,172	3,647,168 4,188,098	6,127,720	2.948.530
1796 1797	••	28		9,674,780	5,702,360 4,891,530	12,951,812 11,714,431	5,123,319	2,539,630 1,086,170	3,247,59
•••	Aug.	31	867,585	10,246,535	7.765,350	8,765,224	9,495,946	4,089,620	3,471,390
1798 1799	Feb.	28	1,448,220	11,647,610 11,494,150	6,148,900 8,131,8 9 0	11,241,333	5,55H,167 5,528,353	5,828,940 7,563,900	3,383,710 3,511,310
1800	::	::	471.540	15,372,930	7,062,680	13,975,663	7,448,387	6,144,250	3,661,150
1801	••		2,634,760	13,578,500	10,745,840	15,958,011	10,466,719	4.640.120	4,105,73
1803	::	••	2,612,020 2,968,960	12,574,860 12,350,970	6,858,910 8,050,940	14,199,094 9,417,887	7,760,796 14,497,013	4,152,950 3,776,750 3,372,140	4,067,68
1804	::	29	4,531,270	12,546,560	8,676,830	14,684,686	12,314,254	3,372,140	4,616,450
1805	••	28	4,660,160	13,011,010	19,083,690	16,889,501	11,771,889 11,777,471	0,883,800	4,590,40
1846 1807	::	•••	4,458,600	13,271,590 12,840,790	9,080,790 11,829,390	14,813,599 13,452,871	13,955,589	5,987,190 6,142,840	4,867,35
1808	::	29	4.095,170	14,093,690	11,961,960	14,149,501	13,234,579	6,142,840 7,855,470 4,488,700 3,501,410	5,088,73
1809	••	28	4,301,500 5,860,420	14,241,360	9,982,950 12,457,310	14,743,425	14,374,775	4,488,700	5,081,09
1810 1811	::	••	7.114,090	16,246 130	11,445,650	17,201,800	21,055,946 19,920,550	3,350,940	5,403,08 5,667,42
1812	::	29	7.457,030	15,951,290	11,595,900	22,127,253	15,899,037	2,983,190	6,005,96
1813 1814	••	27 28	7,713,610 8,345,540	15,497,390	11,268,180	25,036,626	12,894,314	2,894,500	6,336,34
	Feb.	28	9,035,250	16,455,540 18,226,400	12,455,460 11,702,250	23,630,317 27,512,804	18,359,593 17,045,696	2,204,430 2,036,910	6,937,80 7,631,51
1816		29	9,001,400	18,012,220	12,398,390	19,425,780	23,975,530	4,640,880	8,639,69
1817	••	28	8,136,270	19,261,630	10,825,610	25,538,808	8,739,822 3,991,970	9,680,970	5,736,09
1818 1819	::	27	7,400,680 7,354,230	20,370,290 17,772,470	7,997,350 6,413,370	26,913,360 22,355,115	9,099,885	10,055,460 4,184,620	5,192,27 4,099,55
1820	::	29	6,689,130	17,772,470 16,794,960	4,093,550	22,355,115 21,715,168	4,472,322	4,911,050	3,520,89
1821 1822	••	28	6,437,560 1,374,850	17,447,360 17,290,500	5,622,890 4,689,940	16,010,990 12,478,133	4,785,280 3,494,947	11,869,900 11,087,150	3,158,36
1823	::	::	681,500	17,710,740	7.181.100	13,658,829	4,660,901	10,384,230	3,674,944 3,130,624
1824	::		496,130 416,730	19,250,860	10,097,850 10,168,780 6,410,360	14,341,127	4,530,873	13,810,060	2,847,22
1825	4::-		416,730 396,340	20,337,030 19,002,500	10,168,780	19,447,588 17,414,566	5,503,742 7,691,464	8,779,100 3,634,320	2,817,89
1826	Aug. Feb.	31 28	1,375,250	24,092,680	6,935,940	20,573,258	12,345,322	2,459,510	2,974,24
	Aug.	31	161.960	20,402,300	7,199,060	17,713,881	7,369,749	6.754.230	3,074,44
1827 1828	Feb.	28 29	661,390 416,260 356,830	21,229,220	8,801,660 9,198,140	18,685,015	4,844,515	10,159,020	2,996,28
1829	::	28	356,830	21,564,450 19,514,020	9,553,960	19,818,777 19,736,665	3,762,493 5,648,085	10,347,290 6,835,020	2,749,71 2,794,96
1830	••	27	320,490	19,730,240	10,763,150	20,038,890	4,165,500	9,171,000	2,561,51
1831 1832	••	28 29	306,870 299,100	19,293,270 17,752,610	11,213,530 8,937,170	19,927,572	5,281,408 5,836,042	8,217,050 5,293,150	2,612,36
1023	••	. 29	200,100	17,752,010	0,007,170	18,497,448	8,636,042		2,637,76
1834	July	29		19,110,000	15,675,000	28,50	2,000	8,598,000	2,315,00
1835	Oct. Jan.	21 15	:: ::	18,914,000 18,012,000	13,514,000	27,844 26,39),000),000	7,123,000 6,741,000	2,535,00 2,534,00
	Apri	1 7	:: ::	18,591,000	11,289,000	26,221	3,000	6,329, 000	2,677,00
• •	July	28 20		18,322,000	11,561,000	96,24	1,000	6,283,000	2,644,00
1836	Oct. Jan.	12	:: ::	17,930,000 17,262,000	14,227,000	28,66 31,95	1,000	6,186,000 7,076,000	2,690,00 2,599,00
•••	April	5	:: ::	18,063,000	14,751,000	27.92	7.000	7,801,000	2,914,00
• •	July	28		17,940,000	14,495,000	28,31	5,000	6,926,000	2,806,00
1837	Oct. Jan.	21 10	:: ::	17,936,000 17,422,000	13,324,000	28,84. 30,36	5.000	5,257,000 4,287,000	2,842,00 2,876,00
	April	1 4	:: ::	18,432,000	11,192,000	28.84:	3.000	4,071,000 5,226,000	3,29 0,00
••	July Oct.	25		18,261,000	10,672,000	26,727	7,000	5,226,000 6,856,000	3,020,00 2,955,00
1838	Jan.	17 9		18,716,000 17,900,000	10,501,000	25,310 22,600	3,000	8,895,000	2,609,00
	April	1 3		18,987,000	11,262,000	22,83	3,000	10,126,000	2,715,00
••	July	24		19,286,000	10,424,000	22,60	1,000	9,749,000	2,640,00 2,765,00
1839	Oct. Jan.	16	:: ::	19,359,000 18,201,000	9,327,000	22,01 21,68	0.000	9,437,000 9,336,000	2,765,00
	Apri	ΙŽ		18,371,000	8,998,000	22,98	7,000	7.073.000	2,691,00
••	July	23		18,049,000	7,955,000	24,90	5,000	3,785,000	2,686,00
1840	Oct. Jan.	15 7		17,612,000 16,366,000	6,734,000 7,136,000	24,939 22,91	3.000	2,525,000 3,454,000	3,118,00 2,865,00
	April	28	:: ::	16,831,000	7,136,000 7,296,000	22,720	3,000	3,454,000 4,318,000	2,917,00
	July	21		16,951,000	7,578,000	22,86	5,000	4,529,000	2,865,00

1. The returns since 1834 are formed upon the average of the preceding quarter. The amounts on each Saturday night, for thirteen weeks in succession, are added together, and the sum divided by thirteen; this gives the average of the quarter. Hence these returns do not show the progress of the affairs of the Bank during the quarter. For instance, the amount of notes in circulation may be high in the beginning of the quarter, and low at the end of the quarter, or the reverse, or the amounts may be low at both the beginning and the end, and high in the middle of the quarter, or the reverse and yet all these cases may produce the same average.

2. "The circulation" includes the notes of the bead-office, and of all the branches; it also includes the Bank Post Bills issued at the former, and the drafts drawn by the branche upon the parent establishment, or upon each other. The bank did not publish the branch circulation separately until the year 1840, when it was furnished to the Parliamentary Committee on Banks of Issue, from whose Report it appears to have fluctuated in the years 1836 and 1839 from £33,723,000 to £4,337,000.

3. The deposits include those at the head-office and all the branches: they are formed of bills under discount, Exchequer bills, the dead weight, and other government securities, loans on nortinge, doc.

mortgage, &c.

5. The bullion includes both gold and silver, whether coined or uncoined, and whether at the

5. The bullion includes both gold and silver, whether comes or uncomes, and whether as the head-office or the branches.

6. The difference between the liabilities and the assets forms the "rest," or surplus capital, arising out of accumulated profits, and which is over and above the capital of £14,563,000, upon which the dividends are paid to the proprietors.

The defects of the quarterly returns have been supplied by the last report of the Committee on Banks of Issue (Par. Paper of 7th August 1840, No. 602), the Appendix to which contains a weekly statement of the liabilities and assets of the bank from March 1832 to March 1840. The following is a copy of the last of these statements:—

BANK OF ENGLAND, March 31, 1840. BANK OF ENGLAND, March 31, 1840.

DERE OF MACHINE	2,
Liabilities.	Assets.
Circulation:	Public Securities:
London£12,446,000	Advances on Exchequer Bills :
Country 3,962,000	Deficiency£340,000
16,398,000	Other Exchequer bills. 481,000
Deposits, Public, viz.:	Exch. Bills purchased1,080,000
Exchequer Account 806,000	Stock and Annuities 10,132,000
For payment of dividends 393,000	12,003,000
Savings Banks 18,000	Private Securities :
West India Compensation	Bills discounted:
Other public accounts1,187,000	London
2,404,000	Country3,275,000
Deposits, Private, viz.:	4,068,000
London Bankers	East India Bonds
East India Company 603,009	City Bonds, &c1,359,000
Loan from ditto	Mortgage1,296,000
Bank of Ireland, & Royal	Bills of Exchange2,267,000
Bank of Scotland 70,000	Exch. Bills, Stock, &c. 335,000
Other deposits2,141,000	5,257,000
Deposits at Branches 472,000 4,026,000	3,207,000
4,030,000	£21,326,000
	Bullion4,446,000
£22,828,000	
222,020,000	£25,772,000

IV. London Bankers.—The private bankers in London were formerly the gold-smiths, as already noticed, who, after a time, gradually relinquished their original pursuit and became exclusively bankers. They issued notes, and continued to do so even after the establishment of the Bank of England; but from this branch of business they have long since withdrawn. There are at present fifty-four private banking-houses in London, and of these, three, namely, Messrs Child and Company, Messrs Hoares and Company, and Messrs Snows and Company, were in existence before the Bank of England. Their business chiefly consists in acting as depositaries of money, dissounting bills, and officiating as agents for banks out of London. They allow no interest on deposits; but, on the other hand, they charge no commission for paying the drafts of those who keep accounts, or for the trouble of presenting their cheques and bills for payment; the balance at their credit being considered a sufficient remuneration for keeping the account, and this balance is expected to be large or small, according to the number, amount, and nature of the transactions. They likewise afford considerable facilities to their customers, both in discounting bills, and by temporary loans, with or without security, according to circumstances. Bills for other parties are commonly discounted through the medium of brokers. This branch of business they transact with great advantages at to security, from the unreserved confidence which they are accustomed to place in one another as to the credit of their respective customers. IV. LONDON BANKERS.—The private bankers in London were formerly the goldin one another as to the credit of their respective customers.

"The deposits held by the London bankers are generally composed of very large sums, which are necessarily payable on demand; and hence they cannot be made use of to the same extent as those which are intrusted to country bankers, and which, whenever interest is allowed are usually

left with them for a stipulated period." "The London banks, in order to be able to meet their engagements, usually keep a large deposit, nearly equal perhaps to half of what they hold in neserve in the Bank of England; a portion of their energy equal perhaps to half of what they hold in neserve in the Bank of England; a portion of their deposits in bills of exchange and promisory notes than in pulse proportion of their deposits in bills of exchange and promisory notes than in pulse scurities. The city banker is, however, under a disadvantage in this respect which is not felt by the banker at the west end of the town. The latter may, to a certain extent, depend upon the use of the money deposited with him, as his accounts are numally those of country gantlemen and individuals out of trade; whereas the former, whose accounts are principally these of persons actively engaged in commercial or money operations, can hardly know three days beforehand what the amount of his deposits may be at any given period. The London bankers are obliged to employ heir money occasionally at a very low rate of interest." (Mr Glyn's Evidence, 1832.)

The Clearing-House was instituted by the London bankers about the year 1775, in order to save the time, risk, and inconvenience of sending round to each other for payment of the numerous cheques which they daily receive from their customers.

"In a large room in Londard Street, shout thirty clerks from the several London bankers box by his side, and the name of the firm to which he belongs in large characters on the wall above his head. From time to time other clerks from every house enter the room, and, passing along, drop into the box the cheques due by that firm to the house from which this distributor is sent. The clerk at the table enters the amount of the several cheques in a book previously prepared, under the name of the bank to which they are respectively due." "At four o'clock all the boxes are removed, and each clerk adds up the amount of the cheques put hinto his box and payab

The establishment of the clearing house has led to new arrangements in several branches of business. The stockbrokers for instance now settle all their receipts which a broker draws on his banker being paid by the cheques of other brokers which a broker draws on his banker being paid by the cheques of other brokers which he lodges to his credit. The colonial brokers and other classes have fixed days for settling their accounts, and on these days draw cheques on their bankers in the morning, and deposit others to meet them at a subsequent part of the day. The institution of the clearing-house has thus become entwined with the general

The institution of the clearing-house has thus become entwined with the general commerce of the country.

Metropolitan Joint-stock Banks.—Of late years several extensive joint-stock banks have been established in the capital, as the London and Westminster, the London Joint-stock, the Metropolitan, the Union, and others. These banks conduct their business in some respects differently from the private bankers, particularly in reference to deposits on which they allow interest; charging likewise a commission upon the drawing accounts instead of requiring a balance. They are viewed with jealousy by the Bank of England as well as the private bankers, by whom they are excluded from the clearing-house; but being powerfully supported, they have been enabled successfully to meet this opposition; and it is considered probable that their number will increase. their number will increase.

V. English Provincial Banks.—The act of 1708 exercised an unfavourable influence upon the banking business out of London, the prohibition of the number of partners to six, having, as already noticed, been understood to apply not to banks of issue alone, but to banks of all kinds. At the time the enactment took place, and for many years after, the extent of injury arising from it was not perceived, as there were few provincial banks in England, and consequently few failures among there were new provincial banks in England, and consequently tew latines among them; but during the greater part of the last half century, the case has been very different. After 1770, the increase of town population, consequent on the progress

of the cotton and fron manufactures, occasioned an addition to the number of banks; and during the ten years of prosperity and peace (1783-93) which followed the close of the American war, they multiplied with great rapidity. The sudden check, however, which was given to trade by the transition from peace to war in 1793, fell directly on the provincial banks, and by causing twenty-two of them to declare their insolvency in one year, brought into view the pernicious effect of the act of 1708. In 1797, when their number was about 280, leave was given to them, as well as to the Bank of England, to issue £1 and £2 notes. This privilege having been sounded with the important one of not paying their notes in each an extraordinary 1708. In 1797, when their number was about 200, leave was given to them, as well as to the Bank of England, to issue £1 and £2 notes. This privilege having been coupled with the important one of not paying their notes in cash, an extraordinary extension of their business suddenly took place; and between 1797 and 1814 their number increased to 900. In the course of the three years 1814, 1815, and 1816, however, ninety insolvencies occurred, and an equal number of dissolutions of partnership, which reduced the number of banks to between seven and eight hundred. In the year of speculation, 1825, their number again increased, but it was once more reduced by the failure of eighty in that and the following year. These stoppages, and the injury which resulted from them, at last forced the defective constitution of the provincial banks upon the attention of the government, and this more particularly from the contrast presented by the state of banking in Sootland, where, for upwards of a century, scarcely a single bank of issue had proved insolvent in consequence chiefly of the non-existence of the limitation in question. Accordingly, in 1828, the act 7 Geo. IV. c. 46, was passed, allowing joint-stock banks to be formed in all places beyond the metropolitan district, it being at the same time arranged (7 Geo. IV. c. 46, 8 15) that the Bank of England should establish branches, and that notes under £5 should be withdrawn from circulation by April 5, 1829. By a subsequent act in 1833, the provincial banks were allowed to tender Bank of England notes instead of gold in exchange for their notes.

Statutory Regulations.—These are principally embodied in 7 Geo. IV. c. 46, and 3 & 4 Wm. IV. c. 83, already noticed.

The statute first mentioned, emots (§ 1), that copartnerships or societies, though consisting of most than drawn are not be supplementary.

Statutory Regulations.—These are principally embodied in 7 Geo. IV. c. 45, and 3 & 4 Wm. IV. c. 83, already noticed.

The statute first mentioned, enacts (§ 1), that copartnerships or societies, though consisting of more than six persons, may be bankers in England, and may issue notes, provedied such copartnerships shall have the whole of their banking establishments beyond sixty-five miles from London, and that all the partners are liable for the whole debts of the bank; and (§§ 4, 5) that a return be made to the Stamp-office, before commencing business, and between the 3th Feruary and 25th March annually, of the name of their firm, of the names and places of abode of all their partners, of the places where the banks are established, and of two or more of their number who shall have been appointed public officers, which returns shall be open for the impection of the public on payment of one shilling for every search. (§ 3) Special returns must be made of any additional public officers, of all retiring and newly-appointed partners, and of any new agencies. (§ 9) Such banking companies are entitled to sue and be sued in the name of their public officers; and (§§ 19, 13) when judgment is obtained against such public officers, or secution may less used against any member of the copartnership. (§ 16) The banks are allowed to compound for the stamp-duties on their notes at the rate of 7s. per anum for every £100 in circulation is less than 10 feet and 10 feet and

Nature of Business.—All the provincial banks discount bills, grant advances or credits on accounts, effect remittances, and receive deposits on which they allow

credits on accounts, effect remittances, and receive deposits on which they allow interest; but their mode of transacting business is not uniform.

On current accounts, they allow from 2½ to 4 per cent. interest,—a commission of ½ per cent. being charged on all sums paid by the bank, beindes from 4 to 5 per cent. Interest on overdrafts; the usages in this respect, however, differ much in different districts. Advances are often made without security, but more commonly upon a promissory note by the party with surefies; sometimes also upon bonds, and the lodgement of title-deeds. The rate of interest allowed on deposits varies from about 2 to 3 per cent., and notice is in general required before any considerable sum can be withdrawn. Current or drawing accounts are balanced half-yearly; and bills lodged by parties having such accounts, are passed to their credit, as on June 30, and December 31. English.

bills are always made payable at a London bank, a circumstance which facilitates their circulation, and enables provincial bankers more readily to meet any exigency by rediscounting them. The London agent of a provincial bank is paid for his trouble either by a certain amount being allowed to remain in his hands without interest, by a commission on his payments, or by a fixed annual sum. Most of these banks issue notes which are often made payable at their London agent's establishment, as well as at their own. The profits from this source were reduced by the suppression of those under £5, which, prior to 1859, formed about one-half of the circulation; but the reduction is estimated at only 30 per cent., owing to the larger amount of other notes since taken by the nubble

public.

There are exchanges of notes between the banks in the country towns either once or twice a-week as may be arranged, and the balance is paid by an order at sight upon London. The system of exchanges is less comprehensive than in Scotland; but in that part of the island, the circulation of the larger banks is very widely diffused through their numerous branches; whereas, the country circulation of England pretty much divides and restricts itself to particular districts, and within which, in each case, the issues of the several banks almost exclusively circulate. Any notes that find their way beyond such limits are of trifling amount, and are speedily returned to the banks by whom they were issued, or their London agents.

Account showing the Amount of Notes circulated in England and Wales by Private Banks, and Joint-stock Banks and their Branches, from Returns under 3 & 4 Wm. IV. c. 83.

Q	arters t	0	Private.	Joint Stock,	Total.	Q	Quarters to		Private,	Joint Stock.	Total.
	4		£	£	£	1000			£	£	£
	Dec.				10,152,104	1837.					11,031,06
1834.	March	29.	8,733,400	1,458,427	10,191,827	-	July	1	7,187,673	3,684,764	10,872,43
-	June	28	8,875,795	1,642,887	10,518,682	-	Sept.	30	6,701,996	3,440,053	10,142,04
-	Sept.	27.	8,370,423	1,783,689	10,154,112	-	Dec.	30	7,043,470	3,826,665	10,870,13
-	Dec.				10,659,828		March		7,005,472		
1835.	March				10,420,160	-	June		7,383,247		
-	June	27	8,455,114	2,184,697	10,939,101	-	Sept.	29.	7,083,811	4,281,151	11,364,96
-	Sept.	26	7.912.587	2,508,036	10,420,623	-	Dec.	31	7,599,942	4,625,546	12,225,48
-	Dec.					1839.	March	30	7,642,104	4,617,363	12,259,46
1836.	March	26	8,353,894	3,094,025	11,447,919		June	29	7,610,708	4,665,110	12,275,81
_	June				12,202,196	-	Sept.		6,917,657		
-	Sept.	24.,	7,764,824	3,969,121	11,733,945	-	Dec.	28	7,251,678	4,170,767	11,422,44
-	Dec.	31	7,753,500	4,258,197	12,011,697	1840.	Mar.	28	6,893,012	3.940.232	10,833,24

ENGLISH PROVINCIAL JOINT STOCK BANKS.

(The capital, and the circulation of these banks which issue notes, are stated according to the House of Commons Report for 1836, Par. Paper No. 591, and their Report for 1837, P. P. No. 531. The number of partners and branches* are shown for 1839, according to Return to the House of Commons in that year, P. P. No. 530.)

		$\overline{}$		· of		Circulation
Designation.	Head Office.	Form-	Part.	Bran-	Capital,	in Quarter to Dec. 31, 1836.
2-4		<u></u>	-	obes.		
	Ashton	1,000	292		£	£
				0	20,330 25,100	8.947
Barnsley Banking CompanyBilston District Banking Company	Barnsley Bilston	1002	131		27,375	
	Birmingham				50 ,000	9,706
	Du minguam	1832			73,785	22,379
		1836				
		1836			36,400	• • • • • • • • • • • • • • • • • • • •
and Midland Bank		1837				
and Midland Bank Borough Bank Bolton, Bank of	Bolton	1836			90,670	1
Bradford Banking Company	Bradford	1827			77,900	33,019
Commerical Joint-stock Bg. Co		1833			48,095	20,575
Bristol Old Bank.	Bristol	1826	7	ŏ	140,000	104,352
Bury Banking Company	Bury	1836	108		63,925	8,256
Bury and Heywood Banking Company		1836	48		00,022	0,550
Carlisle and Cumberland Banking Co		1836			50,950	6,997
Carlisle City & District Banking Company.		11837	315			
Cheltenham & Gloucestershire Bank	Cheltenham	1836	157	l ī l	22,625	9,000
Chesterfield & North Derbyshire Bank, Co.	Chesterfield	1832	96	ō	23,380	16,255
Commercial Bank of England	Manchester	1834	627	16	262,485	113,527
County of Gloucester Bank	Gloucester	1836	276	8	176,750	87,424
Coventry and Warwickshire Banking Co	Coventry		276		43,490	31,225
Coventry Union Banking Company		1836	152	4	32,700	
Cumberland Union Banking Company	Workington	1829	149	5	18,810	36,870
Darlington District Joint-stock Bank. Co	Darlington	1832	341	14	55,425	73,285
Derby and Derbyshire Banking Company	Derby			1	40,900	27,656
Devon and Cornwall Banking Company	Plymouth			14	56,820	110,762
Dudley and Westbromwich Banking Co	Dudley	1833	179	1	32,325	42,030
East of England Bank	Norwich		501	26	156,322	84,574
	Swansea		102	1	32,500	• • •
Gloucestershire Banking Company	Gloucester	1831	258	5	100,000	76,132
Gloucester County and City Bank		1835	•••		19,720	
Halifax Joint-stock Banking Company	Halifax	1829	207	0	44,475	95,395
Commercial Banking Company		1836	164		65,000	13,348
and Huddersfield Banking Co		1836	394	1	83,775	44,549

The number of branches, though taken from a return made by the Stamp-office, is not always accu-te, as it is a common practice of the banks to insert in their liomses places where circumstances may gluon them to establish branches, but where none were in existence at the times the lioense was granted.

	· ·	_		. of	Advanced Copins	Circulation
Designation.	Head Office.	1	Part-	20.00	Capital. 1836-97.	in Quarter to Dec. 31, 1837.
		_			£	•
Hampahire Banking Company Heston Banking Company Herefordahire Banking Company Huddersfield Banking Company Huddersfield Banking Company Hull Banking Company Imperial Bank of England Knaresborough and Claro Banking Co. Lancaster Banking Company Leanington Bank Priors& Warwickshire Bg. Co.	Southampton	1834	179	2	28,445	26,466
Heiston Banking Company	Helston	1830	17 131	0	4,190 30,300	2,896
Hieretordanire Banking Company	Huddersfield	1897	330	7	65,180	38,580
Fluil Banking Company	Hull	1833	940	6	41.950	74,980
Imperial Bank of England	Manchester	1836	654	6	73,560	
Knaresborough and Claro Banking Co	Knaresborough .	1831	161	10	21,620	37,944 48,701
Lancaster Hanking Company	Lancaster	1836	135 167	3	60,750 40,125	287
Learnington Bank Priors& Warwickshire Bg. Co.	Domining to it.	1835	104	4	22,990	24,145
Leeds Banking Company de West Riding Banking Company Commercial Banking Company	Leeds	11828	398	ō	190,480	34,193
& West Riding Banking Company		1835 1836	224	1	67,725	37,695
Commercial Banking Company Leicestershire Banking Company Lichfield, Rugeley, & Tamworth Bank. Co. Lincoln & Lindsey Banking Company Liverpool, Bank of,	v	1830	991 144	0	50,000	21,975
Leicestershire Banking Company	Lichteld	11136	150	4	49,440 28,000	36,332
Lincoln & Lindsey Ranking Company	Lincoln.	1833	230	11	53,510	67,055
Liverpool, Bank of	Liverpool	1831	529	ō	390,170	
Commercial Banking Company		1832 1835		0	338,900	
Union Bank of		1836	338 465	0	257,360	• • • • •
Tradesmens' Bank		1836	364	0	94,375	• • • • • • • • • • • • • • • • • • • •
Powel Bank of	1 :: ::	1836	257	ŏ	352,930	::::
Liverpool, Bank of, Commercial Banking Company. Union Bank of, Tradesmens' Bank. Albion Bank. Royal Bank of, Banking Company. United Trades' Bank Borough Bank. Central Bank of, Phornix Bank	1 :: ::	1836	192	ŏ		
United Trades' Bank		1836	394	0	106,700	• • • •
Borough Bank		1836 1836		0	206,225	••••
Central Bank of	•••••	1837		0	5,790	• • • • •
Phoenix Bank	Manchester	1829		2	741,030	136,366
A Livernool District Rank.		1829	1287	22	749,725	616
Phoenix Bank Manchester, Bank of & Liverpool District Bank Union Bank of	1	1836	411	0	155,425	
& Salford Bank		1836		0	271,900	
Monmouth and Glamorganshire Bank. Co.	Newport	1836 1836		10	138.580	32,879
Moore & Robinson Nottinghamah. Bg. Co	rottingnam	1833	157 712	69	51,282 367 635	22,433 329,480
National Provincial Bank of England	Newcastle	1836	55	8	367,635 90,317	3,835
Monnouth and Glamorganshire Bank. Co. Monmouth and Glamorganshire Bank. Co. Matomal Provincial Bank of England Newcastle-on-Tyne Joint-stock Bank. Co. Newcastle, Shields, and Sunderland Union				"	,,	1
		1836		10	115,168	58,798
Joint-stock Banking Company. Newcastle Commercial Banking Company. Northamptonshire Banking Company. Union Bank.	L :: ··.	1936	162	0	20,425	4,379
Northamptonshire Banking Company	Northampton	1838	316	3	47,630	33,657
Dientham and Central Bank of Bashand	Manchester	1834	1088	اةا	107,500 711,860	89,776 306,089
North of England Joint-stock Ranking Co.	Newcastle	1832	610	21	240,000	105,670
North & South Wales Bank	Liverpool	1836	476	43	150,360	52,358
Northumberland & Durham District Bank.	Newcastle	1036	303	. 8	123,812	1 -:::-
North Wilts Banking Company	Melksham	1834	239	13	37,975	60,152 52,522
Nottingham and Nottinghamshire Bank. Co.	Oldbarn	1836	334 58	8	81,450 10,210	2,296
Danes' Lelectorships Benking Cornery	Leicester	1836	53	ä	16,350	30.138
Haddleworth Banking Company	Saddleworth	1833	107	8	30,850	20,790 35,778 18,771
Sheffield Banking Company	Sheffield	1831	210	1	92,170	35,778
& Hallamshire Banking Company.		1030	638	0	114,057	18,771
& Rotherham Joint-stock Bg. Co	Shier	1836	970	2	33,125 40,215	48,295 50,509
Stamford Spalding & Boston Banking Co.	Stamford.	1831	87	15	44,080	68,748
Stockport, Bank of	Stockport	1836	315	ō	60,625	
Stockton and Durham County Bank	Stockton	1838	122	Ò		
Newcastle Commercial Banking Company. Northamptonshire Banking Company. Northern and Central Bank of England. Northern and Central Bank of England. North of England Joint-stock Banking Co. North & Bouth Wales Bank North Wilts Banking Company. Nottingham and Nottinghamshire Bank. North Wilts Banking Company. Pares' Leicestershire Banking Company. Banking Company. Banking Company. & Hallamshire Banking Company. & Hallamshire Banking Company. & Hallamshire Banking Company. & Rotherham Joint-stock Bg. Co. Bhropshire Banking Company. Stamford, Spalding, & Boston Banking Co. Stockport, Bank of. Stockton and Durham County Bank. Stourbridge & Kidderminster Banking Co. Stuckey's Banking Company. South Lancashire Bank. Bouth Wales, Bank of. Southern District Banking Company. Walesiald & Neusleydale Eanking Company. Walesiald & Hanking Company. Walesiald Banking Company. Walesiald & South Staffordshire, Bank of. Wast Riding Union Banking Company. Westmoreland, Bank of. West of England and South Wales District	Stourbridge	1834	195	2	45,000	67,167
Stuckey's Banking Company	Monohootes	1836	900	96	65,000 150,212	289,070
South Walse Bank of	Carmarthen	1835	7	ŏ	17,500	6,560
Southern District Banking Company	Southampton	1837	109	8		
Sunderland Joint-stock Banking Company	Sunderland	1835	148	0	30,575	
Swaledale & Wensleydale Banking Comp	Hichmond	1830	218	9	26,325	10.050
Wakefield Hanking Company	Walsall	1835	140	0	44,920 30,575	10,950 16,680
Warming & Double Distriction Company	Warwick	1834	iii	6	32,900	43,505
West Riding Union Banking Company	Huddersfield	1832	480	3	63,900	40,360
Westmoreland, Bank of. West of England and South Wales District	Kendal	1823	153	0	21,450	21,376
West of England and South Wales District	landara.	1834	565	ا ۱۰۰	213,530	76,405
Western District Banking Company	Plymouth	1836	322	12	30,600	17,880
West of England and South Wales District Bank Western District Banking Company Wilts and Dorset Banking Company Whitehaven Joint-stock Banking Company Bank of Banking Company	Salisbury	1836	442	19	63,105	74,976
Whitehaven Joint-stock Banking Company	Whitehaven	1829	228	1	28,050	42,331
Bank of	l	1837	121	1		l
Bank of Wolverhampton & Staffordshire Bank. Co. York City and County Banking Company. Union Banking Company. Yorkshire District Bank Agricultural and Commer, Bg. Co.	Wolverhampton	1831	230	0	50,000	51,928
York City and County Banking Company	X OF	1833	373	7	75,000 63,000	94,500 81,090
Vorkships District Rowk	Leeds	1834	1044	30	389,985	231,483
Agricultural and Commer. Re Co.	York.	1836	618	6	72,875	16,224
T white man committing on						

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bills are always made payable at a London bank, a circumstance which facilitates their circulation, and enables provincial bankers more readily to meet any origency by rediscounting them. The London agent of a provincial bank is paid for his trouble either by a certain amount being allowed to remain in his hands without interest, by a commission on his payments, or by a fixed annual sum. Most of these banks issue notes which are often made payable at their London agent's establishment, as well as at their own. The profits from this source were reduced by the suppression of those under £5, which, prior to 1859, formed about one-half of the circulation; but the reduction is estimated at only 30 per cent., owing to the larger amount of other notes since taken by the public.

public.

There are exchanges of notes between the banks in the country towns either once or twice a week as may be arranged, and the balance is paid by an order at sight upon London. The system of exchanges is less comprehensive than in Scotland; but in that part of the island, the circulation of the larger banks is very widely diffused through their numerous branches; whereas, the country circulation of England pretty much divides and restricts itself to particular districts, and within which, in each case, the issues of the several banks almost exclusively circulate. Any notes that find their way beyond such limits are of trifling amount, and are speedily returned to the banks by whom they were issued, or their London agents.

Account showing the Amount of Notes circulated in England and Wales by Private Banks, and Joint-stock Banks and their Branches, from Returns under 3 & 4 Wm. IV. c. 83.

Q	narters t	0	Private.	Joint Stock.	Total.	Quarters to		Private,	Joint Stock.	Total.	
			£	£	£			4	£	£	£
LR33.	Dec.				10,152,104	1837.					11,031,063
1834.	March	29	8,733,400	1,458,427	10,191,827	-	July	1	7,187,673	3,684,764	10,872,437
-	June	28	8,875,795	1,642,887	10,518,682	-	Sept.	30	6,701,996	3,440,053	10,142,045
-	Sept.	27	8,370,423	1,783,689	10,154,112	-	Dec.	30	7,043,470	3,826,665	10,870,13
_	Dec.	28	8,537,655	2,122,173	10,659,828	1838.	March	31	7,005,472	3,921,039	10,926,511
1835.	March	28	8,231,206	2,188,954	10,420,160	-	June	30.	7,383,247	4,362,256	11,745,500
-	June	27	8,455,114	2,184,687	10,939,101	-	Sept.	29.	7.083,811	4,281,151	11,364,969
-	Sept.	26	7,912,587	2,508,036	10,420,623	-	Dec.	31	7,599,942	4,625,546	12,225,488
-	Dec.	26.	8,334,863	2,799,551	11,134,414	1839.	March	30	7.642.104	4,617,363	12,259,467
836.	March	26	8,353,894	3,094,025	11,447,919	-	June	29	7,610,708	4,665,110	12,275,818
_	June	25	8,614,132	3,588,064	12,202,196	-	Sept.				11,684,970
_	Sept.	24	7,764,824	3,969,121	11,733,945	-	Dec.				11,422,443
-	Dec.	31	7,753,500	4,258,197	12,011,697	1840.	Mar.	28	6,893,012	3,940,232	10,833,244

ENGLISH PROVINCIAL JOINT STOCK BANKS.

(The capital, and the circulation of these banks which issue notes, are stated according to the House of Commons Report for 1835, Par. Paper No. 591, and their Report for 1837, P. P. No. 531. The number of partners and branches* are shown for 1839, according to Return to the House of Commons in that year, P. P. No. 530.)

			No. of		Advanced	Circulation
Designation.	Head Office.	Foun-	Part-		Capital,	in Quarter to
Designation.	Tibed Office.	444.	BOTS.	obes.	1826-27.	Les. 81,1836
					£	£
Ashton, Staleybridge, Hyde & Glossop B.	Ashton				20,330	
Barnsley Banking Company	Barnsley				25,100	8,947
Bilston District Banking Company	Bilston	1836	131		27,375	9,706
Birmingham Banking Company	Birmingham				50,000	
Bank of		1832	240	0	73,785	22,379
Town and District Bank. Co		1836		0	••••	
and Midland Bank		1836		0	36,400	
Bolton, Bank of		1837	90	0	• • • • •	
Bolton, Bank of	Bolton	1836			20,670	
Bradford Banking Company	Bradford	1827	165		77,900	33,019
Commerical Joint-stock Bg. Co		1833	150	0	48,095	20,575
Bristol Old Bank		1826	7	0	140,000	104,352
Bury Banking Company		1836	108	0	63,925	8,256
Bury and Heywood Banking Company		1836	48	0		l
Carlisle and Cumberland Banking Co	Carlisle	1836	275	8	50,950	6,997
Carlisle City & District Banking Company.		1837	315			
Cheltenham & Gloucestershire Bank	Cheltenham				22,625	9,555
	Chesterfield		96	0	23,380	16,255
	Manchester			16	262,485	113,527
County of Gloucester Bank	Gloucester				176,750	87.424
	Coventry	1835	276		43,490	31,225
Coventry Union Banking Company		1836	152	4	32,700	18,439
Cumberland Union Banking Company	Workington	1829	149	5	18,810	36,870
Darlington District Joint-stock Bank. Co	Darlington		341	14	55, 125	73,285
Derby and Derbyshire Banking Company	Derby	1834	187	1	40,900	27,656
Devon and Cornwall Banking Company	Plymouth	1832	196	14	56,820	110,762
Dudley and Westbromwich Banking Co	Dudley	1833	179	- i l	32,325	42,030
Rest of England Bank	Norwich		501	26	156,322	84,574
Glamorganshire Banking Company	Swansea		102	ī	32,500	
Gloucestershire Banking Company	Gloucester	1831	258	5	100,000	76,132
Gloucester County and City Bank		1835			19.720	
Halifax Joint-stock Banking Company	Halifax	1829	207	Ö	44,475	25,395
Commercial Banking Company		1836	164	Ó	65,000	13,348
and Huddersfield Banking Co		1836	394	ĭ	83,775	44,549

The number of branches, though taken from a return made by the Stamp-office, is not always accurate, as it is a common practice of the banks to insert in their licenses places where circumstances may include them to establish branches, but where soons were in existence at the time the license was granted.

Designation					. of	A dvenood	Circulation
Hampshire Banking Company	Designation.	Head Office.	Four-	Part-		Capital, 1836-87.	in Quarter to Dec. 31, 1837.
Helston Banking Company						£	£
Ac West Riding Benking Company Commercial Banking Company Licelestershire Banking Company Lice	Hampshire Banking Company	Southampton	1834	179		98,445	26,466
Ac West Riding Benking Company Commercial Banking Company Licelestershire Banking Company Lice	Herefordshire Banking Company	Hereford	1836	131	7	30,300	
Ac West Riding Benking Company Commercial Banking Company Licelestershire Banking Company Lice	Huddersfield Banking Company	Huddersfield	1827	330		65,180	38,580
Ac West Riding Benking Company Commercial Banking Company Licelestershire Banking Company Lice	Hull Banking Company	Hull	1833	240		41.950	74,960
Ac West Riding Benking Company Commercial Banking Company Licelestershire Banking Company Lice	Imperial Bank of England	Knamehorough	1831	161		73,580	97 944
Ac West Riding Benking Company Commercial Banking Company Licelestershire Banking Company Lice	Ancester Banking Company	Lancaster	1826	135		60.750	
Ac West Riding Benking Company Commercial Banking Company Licelestershire Banking Company Lice	Learnington Bank	Leamington	1835	167		40,125	287
Ac West Riding Benking Company Commercial Banking Company Licelestershire Banking Company Lice	Priors& Warwickshire Bg. Co.	r	1630	104		22,920	24,145
Monrouth and Giamorganshire Bank. Co. Newport 1835 10 181,892 23,433 10 181,892 10 118,1692 10 10 10 10 10 10 10 1	A. West Riding Ranking Company	L0003	1835	224		67.795	37,695
Monrouth and Giamorganshire Bank. Co. Newport 1835 10 181,892 23,433 10 181,892 10 118,1692 10 10 10 10 10 10 10 1	Commercial Banking Company	l :: ::	1836	221		80,000	21,975
Monrouth and Giamorganshire Bank. Co. Newport 1835 10 181,892 23,433 10 181,892 10 118,1692 10 10 10 10 10 10 10 1	Leicestershire Banking Company	Leicester	1829	144		49,440	36,332
Monrouth and Giamorganshire Bank. Co. Newport 1835 10 181,892 23,433 10 181,892 10 118,1692 10 10 10 10 10 10 10 1	Lichfield, Rugeley, & Tamworth Bank. Co.	Lichneld	1833	100		83,000	67 OKE
Monrouth and Giamorganshire Bank. Co. Newport 1835 10 181,892 23,433 10 181,892 10 118,1692 10 10 10 10 10 10 10 1	Livernool Bank of	Liverpool	1831	529		380,170	
Monrouth and Giamorganshire Bank. Co. Newport 1835 10 181,892 23,433 10 181,892 10 118,1692 10 10 10 10 10 10 10 1	Commercial Banking Company		1832	306		338.900	
Monrouth and Giamorganshire Bank. Co. Newport 1835 10 181,892 23,433 10 181,892 10 118,1692 10 10 10 10 10 10 10 1	Union Bank of		1836	338		257,350	• • • • •
Monrouth and Giamorganshire Bank. Co. Newport 1835 10 181,892 23,433 10 181,892 10 118,1692 10 10 10 10 10 10 10 1	Tradesmens' Bank		1836	364		94,375	••••
Monrouth and Giamorganshire Bank. Co. Newport 1835 10 181,892 23,433 10 181,892 10 118,1692 10 10 10 10 10 10 10 1	Royal Bank of	l :: ::	1836	257		352,930	
Monrouth and Giamorganshire Bank. Co. Newport 1835 10 181,892 23,433 10 181,892 10 118,1692 10 10 10 10 10 10 10 1	Banking Company		1836	192			1
Monrouth and Giamorganshire Bank. Co. Newport 1835 10 181,892 23,433 10 181,892 10 118,1692 10 10 10 10 10 10 10 1	United Trades' Bank	•• ••	1838	401		106,700	• • • •
Monrouth and Giamorganshire Bank. Co. Newport 1835 10 181,892 23,433 10 181,892 10 118,1692 10 10 10 10 10 10 10 1	Borough Bank		1836	40		5.790	••••
Monrouth and Giamorganshire Bank. Co. Newport 1835 10 181,892 23,433 10 181,892 10 118,1692 10 10 10 10 10 10 10 1	Phoenix Bank	1	1837	136			
Monrouth and Giamorganshire Bank. Co. Newport 1835 10 181,892 23,433 10 181,892 10 118,1692 10 10 10 10 10 10 10 1	Manchester, Bank of	Manchester	1829	660	4 1	741,030	
Monrouth and Giamorganshire Bank. Co. Newport 1835 10 181,892 23,433 10 181,892 10 118,1692 10 10 10 10 10 10 10 1	& Liverpool District Bank		1838	12267		749,725	616
Monrouth and Giamorganshire Bank. Co. Newport 1835 10 181,892 23,433 10 181,892 10 118,1692 10 10 10 10 10 10 10 1	Union Bank of		1836	925	~ 1		
Joint-stock Banking Company. 1835 162 0 0 118,168 56,798 162 0 0 30,425 4,372 10 10 10 10 10 10 10 1	Monmouth and Glamorganshire Bank, Co.,	Newport	1836	328		128,580	32,879
Joint-stock Banking Company. 1835 162 0 0 118,168 56,798 162 0 0 30,425 4,372 10 10 10 10 10 10 10 1	Moore & Robinson Nottinghamsh. Bg. Co	Nottingham	1836	157		51,282	22,433
Joint-stock Banking Company. 1835 162 0 0 118,168 56,798 162 0 0 30,425 4,372 10 10 10 10 10 10 10 1	National Provincial Bank of England	London	1838	712	69	367,635	329,480
Joint-stock Banking Company. 1835 162 0 0 118,168 56,798 162 0 0 30,425 4,372 10 10 10 10 10 10 10 1	Newcastle-on-Tyne Joint-stock Bank. Co	TAGMCSTRETTO		- 30	۱ ۲	20,317	3,033
Newcastle Commercial Banking Company. Northamptonshire Hanking Company. Northamptonshire Hanking Company. Northamptonshire Hanking Company. Northamptonshire Hanking Company. Northampton Hanking Company. Northampton Hanking Company. Northern and Central Bank of England. Manchester 1834 1068 0 711,963 385,678 North of England Joint-stock Banking Company. Northern Hanking Company. Northern Hanking Company. Northern Hanking Company. Northingham hanking Company. Northingham hanking Company. Northingham hanking Company. Leicester 1835 334 68 161,365 32,358 183,812	Joint-stock Banking Company	l	1836	462	10	115,168	58,798
Northern and Central Bank of England . Manchester 1834 1083 476,500 305,089 North of England Joint-stock Banking Co. Nowcastle . 1834 1083 301 316,570 108,670 North & Bouth Wales Bank . Liverpool . 1836 303 512,381 108,570 108,670 108	Newcastle Commercial Banking Company		1836	162	0	20,425	4,372
Northern and Central Bank of England. Manchester 1834 1068 0 711,860 103,679 North of England Joint-stock Banking Co. North of South Wales Bank Liverpool. 1835 3476 43 160,386 183,381	Northamptonshire Banking Company	Northampton	1836	490	3	107 500	90 778
North of England Joint-stock Banking Co Noversatie 1836 610 21 240,000 105,570	Northern and Central Bank of England	Manchester	1834	1068	ō	711,860	305,082
North & South Wales Bank	North of England Joint-stock Banking Co.	Newcastle	1832	610	21	240,000	105,670
Northumberiand & Diffram District Bank Northumberiand Nor	North & South Wales Bank	Liverpool	1836	903	43	150,360	52,358
Nottingham and Nottinghamshire Bank. Co Oldham 1834 334 6 61,210 52,295 52,29	Northumberland & Durnam District Bank.	Melksham	1835	228	13	37.975	60.152
Didham Banking Company	Nottingham and Nottinghamshire Bank. Co.	Nottingham	1834	334	6	81,450	52,522
Pares Leleestershire Banking Company	Oldham Banking Company	Oldham	1836	56	0	10,210	2,296
Sheffield Banking Company Sheffield 1831 210 1 39,170 35,778	Pares' Leicestershire Banking Company	Leicester	1833	107	3	20,350	90,138
** A Hallamshire Banking Company & Rotherham Joint-stock Bg. Co Shropshire Banking Company & Rotherham Joint-stock Bg. Co Shamford, Spalding, & Boston Banking Co. Stockport, Bank of Stourbridge, Bank 195 9 45,000 67,167 Stuth Lancashire Bank Manchester, Bank of South Bank of Carmarthen Sunderland, Joint-stock Banking Company Sunderland, Joint-stock Banking Company Sunderland, Joint-stock Banking Company Wakefield Banking Company Wakefield Banking Company Warwick & Leamington Banking Company Warwick & Leamington Banking Company Warwick & Leamington Banking Company Water of England and South Wales District Bank Wastor England and South Wales District Bank Western District Banking Company Western District Banking Company Shiffnal Bank of Warwick Warwick & Leamington Banking Company Huddersfield Basis Warwick Shiffnal Basis Stourbridge Basis Sal 1836 1837 1837 1830 1830 1830 1830 1831 1831 1831 1832 1833 1839 1831 1831 1833 1833 1833 1833 1834 1835 1837 1839 1839 1839 1839 1839 1839 1839 1839 1839 1839 183	Sheffield Banking Company	Sheffield	1831	210	l î l	92,170	35.778
Rotherham Joint-stock Bg. Co. Shiffmal 1836 270 3 40,215 46,295 40,215 46,295 40,215 40,2	& Hallamshire Banking Company.		1836	638	ō	114,057	18,771
Shropshire Banking Company Stamford 1833 315 0 0 0 0 0 0 0 0 0	& Rotherham Joint-stock Bg. Co	a	1836	275	8	83,125	48.295
Stockport Bank of Stockport 1836 135 0 66,625 Stockport Bank of Stockport 1836 135 0 66,625 Stockport Bank of Stockport 1836 132 0 Stockport 1836 132 0 Stockport 1836 133 0 Stockport 1836 1336	Shropshire Banking Company	Stamford	1831	87	15	44,080	68 748
Stockton and Durham County Bank Stockton 1838 129 0	Stocknort Rank of	Stockport	1836	315	ő	66,625	
Stourbridge & Kidderminster Banking Co. Stourbridge 1835 1846 65,000 67,167 South Lancashire Bank Manchester 1836 363 0 150,212 South Walos, Bank of Carmarthen 1835 70 0 17,500 6,560 South Walos, Bank of Carmarthen 1835 70 0 17,500 6,560 Southern District Banking Company Sunderland 1836 1846 1836 1846 1836 1846 1847 184	Stockton and Durham County Bank	Stockton	1838	122	Ó		
Stuckey's Banking Company Strict Store	Stourbridge & Kidderminster Banking Co	Stourbridge	1896	195	.9	45,000	67,167
South Wales, Bank of Carmarthen 1835 7 0 0 17,500 6,560	Stuckey's Banking Company	Manchester	1836	362	30	150.919	209,070
Southern District Banking Company Southampton 1837 109 8 Sunderland Joint-stock Banking Company Sunderland 1836 148 9 96,325 Swaledale & Wensleydale Banking Comp. Richmond 1838 196 0 44,920 10,950 Wakefield Banking Company Wakefield Banking Company Wakefield Banking Company Waterland Banking Company Water Riding Union Banking Company Hudderstield 1833 450 2 63,900 40,300 43,605 43,605 44,920 10,950 10	South Wales Bank of	Carmarthen	1835	7	ŏ	17,500	6,560
Sunderland Joint-stock Banking Company. Sunderland. 1835 149 19, 50, 525 18, 520 10, 525 18, 525 1	Southern District Banking Company	Southampton	1837	109	8		
Swatedale & wenteydale Banking Company Wakefield Banking Company Wakefield Banking Company Wakefield Banking Company Wakefield 1832 195 0 44,920 10,950 Wakefield Banking Company Warwick 1834 111 6 39,900 43,505 43,605	Sunderland Joint-stock Banking Company	Bunderland	1836	019	l o	30,575	••••
Waissil & South Staffordshire, Bank of. Waissil 1835 149 1 30,575 16,680 Warwick & Leamington Banking Company West Riding Union Banking Company Huddersfield 1833 400 2 33,900 43,505 43,505 40,580 40,58	Wakefield Banking Company	Wakefield	1832	196	ő	44,920	10,950
Warwick & Leamington Banking Company Warwick 1834 111 6 32,900 43,505	Walsall & South Staffordshire, Bank of	Walsali	1835	149	ĭ	30.575	16,680
West Hiding Union Banking Company Huddersfield 100 1	Warwick & Leamington Banking Company.	Warwick	1834	1111	6	32,900	43,505
West of England and South Wales District Bristol	West Riding Union Banking Company	muddersfield	1833	188	*	21.450	21.376
Bank Bristol. 1834 568 12 213,530 76,405	West of England and South Wales District			100	"		
Western District Banking Company. Plymouth 1830 322 7 30,600 17,830 Wilts and Dorest Banking Company Salisbury. 1836 442 7 63,105 74,976 Whitehaven Joint-stock Banking Company Whitehaven 1839 223 1 23,050 42,331 Bank of. 1837 191 1 1 1 1 1 1 1 1 1	Bank.	Bristol	1834	565	12	213,530	
Wilts and Dorset Hanking Company Sailsoury 1899 19 18,700 18,70	Western District Banking Company	Plymouth	1836	322	,7	30,600	17,880
Wolverhampton & Staffordshire Bank. Co. Wolverhampton 1837 191 1	Wilts and Dorset Banking Company	Whitehaven	1829	228	מו	28,050	42.331
Wolverhampton & Staffordshire Bank. Co. Wolverhampton 1831 230 0 50,000 51,228 York City and County Banking Company. York 1830 973 7 75,000 94,500	Bank of		1837	121	l î l		
York City and County Banking Company. York	Wolverhampton & Staffordshire Bank. Co	Wolverhampton	1831	230	Į į	50,000	51,928
	York City and County Banking Company	York	1837	253	10	75,000 63,000	94,500 81,090
Vorkshire District Bank Leeds	Vorkshire District Bank	Leeds	1834	1055	30	389,985	231,483
Agricultural and Commer. Bg. Co. York	Agricultural and Commer. Bg. Co.	York	1836	618	6	72,875	16,224

VI. Scottish Banks.—The introduction of banking into Scotland took place in 1695, in which year the Bank of Scotland was founded, with a capital of £100,000 storling (or £1,200,000 Scots); but such was then the poverty of the country, that not more than £30,000 were for a considerable time called up, and a large portion even of this sum was advanced by natives of Holland, Hamburg, and England. It remained the only bank until 1727, when the Regul Bank was established by the subscription of £111,547:19:10 of the stock of the Equivalent Company, an association which acquired right to the greater part of the compensation (£398,085,10s.) granted by parliament to Scotland at the Union in 1707. In 1746, the British Linen Company was chartered, with a capital of £100,000, and, having shortly thereafter abandoned the linen trade, became exclusively a banking concern. Smaller banks were soon afterwards instituted in different parts of the country. The expansion of the national resources which occurred after the close of the American war in 1763, naturally led, as in the south, to a great increase of business, and considerable additions were then made to the capital of the larger banks, while about the same time they established branches in the several counties. The banks have since increased with the advancing prosperity of the country, and their number at present is about thirty, which have mostly numerous bodies of partners, as the act of 1708, limiting the number in English banks to six, did not extend to Scotland. Five of these possess charters, which, however, confer upon them no privileges, in regard either to the issue of notes or any other department of business. The charters of the three oldest are by some said to have the effect of restricting the natures to the arronner of their shares but the avenue of the partners, but here the effect of restricting The charters of the three oldest are by some said to have the effect of restricting the liability of the partners to the amount of their shares; but, however this may be, no doubt is entertained that the responsibility of the partners of all the others extends to the full amount of their property, both real and personal: this circumstance has contributed powerfully to the solidity of the Soottish banks.

Notes payable to the bearer on demand were first issued in 1704, by the Bank of Scotland Duving last century these ware frequently circulated for smaller sums

Notes payable to the bearer on demand were first issued in 1704, by the Bank of Scotland. During last century, these were frequently circulated for smaller sums than £1; and at one period, owing to the runs made by the banks upon each other, they were made payable either on demand, or six months after with interest; but these practices were suppressed in 1765. In 1826, when Parliament prohibited one pound notes in England, a similar attempt was made in regard to North Britain; but, a Committee being called for by the Scottish members, the result was, a determination not to interfers with the aviating system.

but, a Committee being called for by the Scottish members, the result was, a determination not to interfere with the existing system.

The Statutory Regulations are principally embedied in the 5 Geo. III. c. 49, which requires that all bank-notes, circulated like specie, shall be made payable on demand, and prohibits those for sums under £1; and in the 7 Geo. IV. c. 67, the enactments of which are similar to those of the 7 Geo. IV. c. 46, already quoted in reference to England. In the act 7 Geo. IV. c. 67, however, the period within which the yearly returns of managers, branches, and partners, must be made to the Edinburgh Stamp-office, is from May 25 to July 25. The stamp-duties payable on notes are the same as in England.

Rusiness Congretions.—These possess a worse uniform character than in the

Business Operations.—These possess a more uniform character than in the south, owing chiefly to the circumstance, that the Edinburgh banks have long had branches established over all the country, in which business is transacted in the same manner as at the head offices. The exchange regulations, afterwards explained, have likewise contributed to this result, by producing a kind of federative connexion between the banks themselves. The system which has thus grown up, will, however, be best explained in detail.

will, however, be best explained in detail.

1. Deposits are received of sums from £10 upwards, which are repaid on demand, with interest at a rate varying from 3 to 3 per cent. They are composed in nearly equal parts of Deposit Receipts granted for money allowed to lie for considerable periods, and of Deposit Accounts, or drawing accounts, which are balanced yearly. The banks make no charge for keeping these accounts, but are supposed to be remunerated by the note circulation connected with the operations upon them. No overdrafts are allowed as in England. The amount of deposits in the Scottish banks is estimated at £25,000,000, nearly one-half consisting of sums not exceeding £300.

2. Cash-credit Accounts, the nature of which has been already explained, form a characteristic feature in the Scottish system, into which they were introduced by the Royal Bank in the year 1729. The sureties, commonly two in number, are bound jointly and individually with the principal, for the balance which shall ultimately arise, including all his liabilities to the amount of the bond. These credits are also granted on the security of real property, and occasionally, under certain restrictions, of the bank-stock. The interest charged on the current balances is commonly the same as the market-rate of discount on bills; occasionally it is one-half per enhigher; but no commission is ever charged, the banks looking, as in the case of deposit-accounts, to the note circulation arising out of the operations on the accounts, as their remuneration for the trouble of keeping them. On this ground, cash-credits are not allowed to continue as dead loans: unless frequently operated upon, they are withdrawn. The number of these accounts at present in Scotland is estimated at 15,000, and the total amount of the bonds, £7,500,000, nearly two-thirds of

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which are supposed to be drawn out. The bonds are rarely for sums exceeding £5000, or below £100; their average amount is about £500.

3. Bills are discounted at a rate varying in general from 4 to 5 per cent., and a commission is seldom charged. The practice in Scotland, with regard to bills, differs from that of England, in respect that comparatively few are made payable in London; and they are never credited by the bank to parties keeping accounts at stated periods half yearly, as common in that country.

4. The issue of notes is intimately connected with all the operations of the Scotlah banks, and by the profits derived from it, they are enabled to transact business, particularly acgards deposits and cash-credits, on a footing highly advantageous to the public. The notes issued at present are for sums of £1, £5, £10, £90, and £100; and, with the exception of silver and copper coins, they compose almost the entire circulation. They are convertible at the head offices into gold, or notes of the Bank of England. The amount in circulation varies, being greatest at the money terms; but, on an average, is nearly £3,250,000, about one-half of which consists of £1 notes.

5. The Scotlish banks also negotiate bills on all parts of the United Kingdom, and on many piaces abroad—buy and sell for their customers stock in the public funds—draw the dividends thereon—and effect remittances from one part of the kingdom to another, by means of letters of credit or bills; the par date for those from Edinburgh or Glasgow on London being 20 days. They likewise facilitate remittances to many other countries, by means of bills drawn at a certain date on their agents in London; which bills, after being sent abroad, are again readily purchased for remittances to Britain. This branch of business has greatly increased since the opening of the trade to India and China. "We perceive," says the author of the Commerce. Money, and Banking of India, "that in the Calcutta price currents the rates of Scotch bank bills are regularly quoted.

The characteristics of the Scottish system of banking, it will be thus seen, are freedom, economy, and security. No monopoly is enjoyed by any one bank to the prejudice of others, and the money trade, like every other, is open to all who choose to engage in it. The currency employed is of the cheapest kind; and the joint effect of the deposit and cash-credit system is to prevent any part of the money capital of the country from remaining unproductive. The security of the whole is generally provided by numerous bodies of partners, large paid-up capital, and the system of exchanges, the practical operation of which is to drive from the field any establishment extending its business in a manner disproportioned to its resources. In the case of the celebrated Ayr Bank, of the East Lothian Bank, and of a few others, heavy losses were sustained by the partners; but the only banks of issue by which the public have sustained losses, since the introduction of banking into Scotland in 1695, are the Stirling Merchant, and Falkirk Union Banks, two small concerns, the aggregate amount of whose deficiencies did not exceed £36,344.

1. CHARTERED BANKS IN SCOTLAND.

		Part-	Br.	Paid-up		Dividend	Share		rice	
17¢30giintabili	tuted.	Bers.	_	Capital.	Rate	Payable.	Paid.	Aug.	184	0.
1. Bank of Scotland	1695	672	31	£1,000,000	6	April and October	£100	166	0	0
2. Royal Bank	1727	764	7	2,000,000	54	January and July	100	100	0	0
3. British Linen Co	1746	164	44	500,000		June and December		233	0	0
4. Commercial Bank	1810	519	52	600,000	7	January and July	100	178	0	0
5. National Bank	1825	1238	33	500,000	6	January and July	10	14	19	0

2. Unchartered Banking Companies in Scotland.

Designation.	insti- tuted.	Part-	Br.	Designation.	Insti- tuted.	Part- ners.	Br.
1. Aberdeen Bank	1767	189	11	13. Edinburgh & Leith Bank	1838	785	6
2. Aberdeen To. & Co. Bank 3. Arbroath Bank	1895 1895	491 80	10	14. { Forbes, Sir W., & Co. } Glasgow Union Bk.Co. }	1830	508	20
4. Ayr Bank	1773	111	1	15. Glasgow and Ship Bank	1749	26	1
5. Ayrshire Banking Co 6. Caledonian Banking Co	1830 1836	1100		i6. Greenock Bank	1785 1792		3
7. Central Bank of Scotland	1834	465	4	18. North of Scotland Bk. Co.	1836	1564	23
8. City of Glasgow Bank	1839	779 818	1 %	 Paieley Commercial B. Co. Perth Banking Company 	1839 1766	344 182	4
9. Clydesdale Banking Co 10. Dundee Banking Co	1763	59	i	21. Renfrewshire Bank. Co	1802	••	5
11. Dundee Union Bank 12. Eastern Bank of Scotland	1849	89 774	1 :	22. Southern Bank of Scot 23. Western Bank of Scotland	1837 1832	226 469	19

The whole of these banks issue notes, and all are joint-stock companies, except Nos. 4, 15, 16, 17, 21. Two other joint-stock banks are at this date (August 1840) projected—the Greenock Union Banking Company, and the Glasgow Joint-Stock Banking Company. Mesers A. Allan & Co., Edinburgh, are now the only private bankers who do not tisue notes.

VII. BANKS IN IRELAND.—The introduction of banking into Ireland took place at a later period than in the two other parts of the kingdom; and its history may be termed a bad epitome of that of England, the same faults having been committed, and

later period than in the two other parts of the kingdom; and its history may be termed a bad epitome of that of England, the same faults having been committed, and the evil arising from them having been much more conspicuous. The Bank of Ireland, which was incorporated in 1782, with a capital of £600,000 Irish, was invested with privileges similar to those of the Bank of England, and its charter contained unfortunately a clause that "no other bank issuing notes should consist of more than six partners." This restriction was inserted in order to give it a monopoly of the circulation; but the effect, as in England, has been te lead to the formation of country banks with inadequate resources. The evils resulting from such banks have been already described in the case of England; but in Ireland they were much more serious, from the less commercial habits of the people; and of fifty country banks established in 1804, no fewer than forty stopped payment: of these, ten failed in one year, namely, 1820, all in the southern part of the island.

The Bank of Ireland was placed in nearly the same relation to the State as the Bank of England. It advanced the greater part of its capital to government; and was intrusted with the management of the Irish department of the national debt. The exemption from paying in cash, granted to the latter establishment in 1797, was extended in the same year to the former, and led to a great increase in its circulation, which, from little more than £500,000 in 1796, was increased by 1815 to £3,000,000. A serious depreciation of the notes of the bank arose in consequence; and the silver currency of the country, though generally in a debased state, became more valuable in the form of bullion, and was all melted down. The community being, in consequence, exposed to the greatest inconvenience, the place of the coins was supplied in Dublin and other parts by counterfeits, and in several districts by a paper currency issued for sums gradually decreasing from 6s, to 6d., and even 3d. It was estimat issuers of this paper money, chiefly consisting of a motley body of shopkeepers, merchants, and petry dealers. The forgeries, frauds, and general inconvenience which resulted from this exceptionable currency led at length to its suppression by law; and the wants of the trade were supplied by the issue of stamped dollars by the Bank.

The charter of the Bank of Ireland was successively renewed, and its capital increased, until 1821, when, on the renewal of the charter for seventeen years (1 and 2 Geo. IV. c. 72), the capital was raised to £3,000,000 Irish, of which £2,850,000 Irish, or £2,630,769:4:8 sterling, were deposited with government,—namely, £1,615,384:12:4 at 4 per cent., and £1,015,384:12:4 at 5 per cent. interest. The yearly dividends of the Bank have been at no time less than 5½ per cent., excepting in 1783-4, when they were 5, and in 1792-8, when they were 2½ per cent. From 1800 to 1814, however, they were 7, 7½, and 7½; from 1814 to 1829, excepting two years, they were 10 per cent.; and since 1829 the rates have been 9, 8½, and 8 per cent. Besides these dividends, the proprietors, at different times since 1793, have received bonuses amounting to no less than £665,000 Irish.

The only benefits ever granted by the Bank to the public, in consideration of its privileges, were a payment of £60,000 Irish in 1791, and, since 1808, the management of the Irish department of the national debt free of charge. The deposit with The charter of the Bank of Ireland was successively renewed, and its capital in-

government of £2,850,000 Irish at the high rates of 4 and 5 per cent. cannot be viewed as any advantage to the latter. On the other hand, it ought to be remarked, that notwithstanding the vicious state of country banking in Ireland in consequence of the Bank's monopoly, no attempt was made by them to establish branches until 1825, when incited by the rivalry of the Provincial Bank. Since the expiry of the charter in 1838, special acts have been passed continuing it from year to year, until after the Report of the sitting Committee of the House of Commons, when the subject of its renewal will be discussed by Parliament, and when it is deemed probable that it will be placed nearly on a footing with those granted to the chartered companies in Scotland.

In the Appendix to the late Parast (1940), at the Committee of the superior of the place of the place

In the Appendix to the late Report (1840) of the Committee of the House of Commons on Banks of Issue, a weekly statement is given of the liabilities and assets of the Bank of Ireland from July 1882 to March 1840. The following is the account for the week ending 28th March 1840:—

BANK OF IRELAND, March 28, 1840.

Liabilities.	Acocto.
Circulation: £5 notes and above£1,816,700 Notes under £51,261,000	Securities :
Deposits : £1,156,500	All other Private secu-
Private & sundry balances1,856,7003,013,900	3,270,800 Specie1,130,500
£6,090,900	£7,179,600

On the renewal of the Bank's charter in 1821, an arrangement was made by which joint-stock banks were allowed to be established at a distance of fifty Irish miles from Dublin; but this arrangement remained inoperative until several vexatious restrictions annexed to it were repealed by an act in 1824. This relief was followed by the institution of the Northern Banking Company at Belfast, the Provincial Bank, and several others.

The statutory regulations of the Irish joint-stock banks are principally embodied in the 6th Geo. IV. c. 42, the enactments of which are similar to those of the 6th Geo. IV. c. 46, already quoted in reference to England. In the former, however, the period within which the annual returns of managers, branches, and partners, are required to be made, extends from the 25th March in any year, to the same date in the year following.

and required with matter of changes and the point-stock banks, excepting the Hibernian and Royal Banks, issue notes for £1 and upwards; and their total circulation, according to the Bank Report for 1840, fluctuates from about £5,500,000 to £6,500,000. The Bank of Ireland, Hibernian Bank, and Royal Bank, receive deposits and discount bills; but the first does not allow interest, and not one of the three grants cash-credits. The other joint-stock banks conduct business on the Scottish system, or a modification of it. Bills on London are drawn at 21 days' date in exchange for cash, and letters of credit are granted for a premium of ½ per cont.

Banking Companies in Ireland, with their advanced Capital, according to Returns to Parliament in 1837, and the Numbers of their Partners and Branches, according to Returns in 1839.

Designation.	Head Office.	Founded.	Partners.	Branches.	Advanced Capital.
Bank of Ireland	Dublin London Belfast Belfast Dublin London Belfast.	1789 1895 1895 1895 1897 1834 1835 1836 1836	1063 798 195 280 3673 *463 679 394	99 0 34 10 16 28 15 8 0	L. Pterling. 2,789,230 250,000 491,780 122,275 125,000 352,789 411,837 904,325 199,275

The Hibernian Joint-Stock Loan Company was instituted chiefly by Roman Catholic gentlemen

Exclusive of branch partners.

in opposition to the Bank of Ireland in Dublin. It cannot, under the existing law, issue notes or establish branches. The Royal Bank is subject to the same restrictions.

The Provincial Bank is managed by a board in Londom, the shareholders being principally resident in England. It carries on business in most of the principal towns of Ireland. The management of each branch bank, subject to the control of the directors, is vested in an agent, with a committee of advice, consisting of two or more gentlemen residing in the district, each of whom must hold at least ten shares.

The National Bank consists also of a board in London, connected with branch or local banks throughout the principal towns in Ireland; but its principle of operation is different from that of the Provincial Bank. The capital of each branch is subscribed equally by the London company, and by a board of local shareholders, and profits are divided in the same proportion. The supremie control is vested in the London board; but it is provided "that each local bank shall be managed by a board of local directors, elected by the local shareholders, subject to the approbation of the directors in London." The National Banks established on January 5, 1839, with the number of partners attached to each were as follows:—Limerick, 684; Clonmel, 646; Carrick-on-Suir, 871; Wasterlord, 618; Wexford and Enniscorthy, 569; Tipperary, 630; Trales, 609; Cork, 630; Kilkenny, 546.

The currency of Ireland was assimilated to that of Britain from and after January 5, 1826, by the act 6 Geo. IV. c. 79. The proportion of the late Irish currency to sterling was as 13 to 12, or £106: 6:8 Irish = £100 sterling.

An account of the principles which regulate the value of bank paper, and a fuller explanation of the rules which govern its circulation in the United Kingdom, are given in the article Money, under which head are likewise considered the improvements or alterations in the system of the United Kingdom, suggested in the Reports made to the House of Commons by the Select Committee on Joint-stock Banks, and Banks of Issue, first appointed in 1836 on the motion of Mr Clay.

Mr Clay.

Principal Works on Banking, &c.:—Adam Smith's Wealth of Nations (Mr M'Culloch's edition); Thornton on the Paper Credit of Great Britain; Report of the Bullion Committee of the House of Commons, 1810; Blake on the Course of Exchange; Tooke on Prices; G. R. Porter's Progress of the Nation, sections III. and IV.; Sir H. Parnell's Historical Sketch of the Bank of England; Sir H. Parnell's Observations on Paper Money, Banking, &c.; J. W. Gilbart's Practical Treatise on Banking; J. W. Gilbart's History and Principles of Banking; Ricardo's Plan for the Establishment of a National Bank, 1824; Reports of the Parliamentary Committees on Scottish Banks, &c. in 1826; Report of the Committee of the House of Commons on the Charter of the Bank of England, 1832; Reports by the Committees of the House of Commons on Joint-Stock Banks, and Banks of Issue, in 1836, 1837, and 1840; and Pamphlets by Messre Samuel Jones Loyd, J. Horsley Palmer, W. Clay, and R. Torrens. See Banks. S. BANKS (LOAN) are institutions formed for the purpose of advancing money

BANKS (LOAN) are institutions formed for the purpose of advancing money upon articles of merchandise. The charters granted to the Bank of England, Bank of Scotland, and Royal Bank of Scotland, authorize them to advance money in this way; but in the present article it is intended to treat only of those loan banks which originated in motives of charity. Institutions of this kind are sometimes which originated in motives of charity. Institutions of this kind are sometimes called Montes Pietatis; the term mont or mount being at an early period applied to any pecuniary fund. They were first established in the fifteenth century, for the purpose of checking the extortions of usurers by lending money gratuitously to the poor upon pledges: they were originally supported by voluntary contributions, but as these were found insufficient, it became necessary to charge interest for the loans. A bank of this kind was formed at Perugia in 1464; another at Rome in 1539; and one at Naples, which was considered the greatest in Europe, in the following year. The present Mont de Pieté at Paris was established in 1777, and so largely has the public taken advantage of it, that it has been known to have in its possession forty casks filled with gold watches.

Banks of this kind are also called "Lombards," from the name of the original bankers or money-lenders. One of these was established in Russia in 1772, and the profit derived from it was given to the Foundling Hospital of St Petersburg.

bankers or money-lenders. One of these was established in Russia in 1772, and the profit derived from it was given to the Foundling Hospital of St Petersburg. In the United Kingdom, the business of making advances to the poor is committed to PAWNEROKERS and LOAN SOCIETIES.

BANKS FOR SAVINGS are institutions for the deposit of savings from the earnings of the poorer classes. They were established on a small scale in a few country parishes about the beginning of the present century; but it was not until after the formation of the Edinburgh Savings Bank by Mr Forbes (now Lord

This plan is understood to have been lately changed for that of the Provincial Bank, except at one or two of the branches.

Medwyn of the Court of Session) that they created much public interest. The practical operation of that bank in a large city, together with the writings of Mr Forbes, and Dr Duncan, minister of Ruthwell, led speedily to their establishment in various parts of England, and they now rank among the most important institutions of the kingdom.

Acts have been passed at various times for the encouragement and regulation of Savings Banks. The existing act is the 9 Geo. IV. c. 92, passed in 1828. The trustees of banks formed in terms of that statute are authorized to invest their deposits in the Banks of England or Ireland on receipts carrying interest at the rate of sits in the banks of England of Freiand on receipts carrying interest at the rate of $2\frac{1}{2}$ d. per cent. per diem, or £3:16:0 $\frac{1}{2}$ per cent. per annum; but it is provided, that "the interest payable to depositors shall not exceed the rate of $2\frac{1}{2}$ d. per cent. per diem, or £3:8:5 $\frac{1}{2}$ per cent. per annum,—the difference being retained by the trustees to defray the expenses of the bank. It is also provided, that "All monies paid into to defray the expenses of the bank. It is also provided, that "All monies paid into the Banks of England or Ireland on the account of Savings Banks shall be invested in bank annuities or exchequer bills." The trustees are not allowed to receive deposits from any individual whose previous lodgements have amounted to £150; and when the balance due to any one depositor, including interest, amounts to £200, no farther interest is to be allowed. Charitable or provident institutions are permitted to deposit sums to the extent of £100 per annum, provided the amount shall not at any time exceed £300, exclusive of interest; and by the act 4 and 5 Wm. IV. c. 40, § 9, Friendly Societies are allowed to deposit to any extent. The lowest deposit received is generally one shilling, and by the act 3 Wm. IV. c. 14, § 29, individuals may not deposit more than £30 in any one year. A few days' previous notice is commonly required before deposits can be withdrawn.

The preceding acts were extended to Scotland in 1835, by the act 5 & 6 Wm. IV. c. 57.

c. 57.

On the 30th November 1837 there were in England 398 Savings Banks holding £16,177,699, belonging to 534,383 depositors, being on an average £30 for each depositor. At the same time there were in Wales twenty-three Savings Banks, holding £401,180, belonging to 13,587 depositors, being an average of £30 for each depositor; in Ireland, seventy-eight Savings Banks, holding £1,776,911, belonging to 632,939 depositors, being on an average £28 for each depositor; in Scotland, nine Savings Banks, holding £13,234, belonging to 13,333 depositors, being on an average £18 for each depositor; in Rectiand, nine Savings Banks, holding £18,498,044, belonging to 634,560 depositors, being an average of about £30 for each depositor; lessides balances belonging to individual depositors, being an average of about £30 for each depositor lessides balances belonging to individual depositors, being an average of about £30 for each depositor. Besides balances belonging to individual depositors, being an average of about £30 for each depositor. Besides balances belonging to individual depositors, being an average of about £30 for each depositor. Besides balances belonging to individual depositors, being an average of about £30 for each depositor. Besides balances belonging to individual depositors in Ireland, £53,315; by 201 of such associations in Wales, £54,696; by 803 of such associations in Bootland, £17,818. The total amount depositor, including the lodgements of 6666 Charlabel Institutions and 6530 Friendly Societies, was £21,333,312.

The comparatively small extent to which the public have availed themselves of Savings Banks in Scotland arises from the circumstance, that the ordinary banks seldom refuse to receive and allow interest on the deposit of a tradesman, though this should be considerably under £10, their general limit.

Savings Banks' Annuities.—The act 3 Wm. IV. c. 14, enables the industrious classes to purchase annuities, through the medium of Savings Banks, from the Commissioners for the reduction of the National Debt. These annuities (not under £4, nor in all exceeding £20) are payable for life, or for a number of years certain, and to commence either immediately, or at the end of any assigned period, as may be desired. Each description of annuity, when deferred, may be purchased either by annual payments (which will be received in monthly instalments or otherwise), by annual payments (which will be received in monthly instalments or otherwise), or by one single payment; the annual payments to cease when the annuity becomes payable. And it is specially provided, that if there be default in making the annual payments, or if the person who has contracted for the annuity die before it becomes payable, the amount of all the payments, exclusive of interest, shall be returned. On the death of the nominee of any life annuity, a fourth part thereof, over and above arrears, is payable to his executors, or the party entitled thereto. These annuities are not transferable; but, on the purchaser's bankruptcy, they become the property of his creditors, from whom they will be repurchased by the Commissioners. The following is an abridgment of some of the tables of these annuities:—

PI.E C	ABLE	TABLE SHOWING THE SUM REQUIRED TO BE PAID AT THE TIME OF PURCHASE, OR I YEARLY INSTALMENTS, FOR A LIPE ANNUITY OF £30, DEFERRED FOR THE FOLLOWING YEARS:—										ase, or in D por the	
	Y OF £30.			1	0 Y	DEFE.			15 Ye	ers.		20 Y	ratte.
		Age.	ln c	ne s	um.	Year	7.	In one	sum.	Yearl	7.	In one sum.	Yearly.
Age.	ا م م		<u>-</u>		_		<u> </u>					£ . 4	8 . 4
15 20 25 30 35 40 41 42 43 44 45 46 47 48 49 50	£ . d. 377 15 6 2 303 15 6 3 343 18 10 7 9 356 1 18 6 297 7 10 297 7 10 297 19 6 207 19 6 207	15 90 91 92 23 94 25 96 97 28 29 30 31 32 33	£ 944 936 936 936 936 937 926 927 921 921 921 921 921 921 921 921 921 921	3 4 3 19 13 5 15 3 10 16 19 18 16	400066666000600	£ 12 25 16 25 12 25 16 25 12 25 4 19 24 14 24 25 12 25 6 25 12 25 6 25 10 22 15 25 6 21 19	4666600006000666	£ a. 198 (0 189 (189 (189 (189 (189 (189 (189 (189	006000660066006	£ 16 1 15 7 15 4 15 1 14 17 14 14 14 14 16 14 2 13 18 13 13 13 13 12 18 12 13 18 12 13 18 12 13 18 19 13 19 18 18 19 18 18 19 18 18 19 18 18 19 18 18 19 18 18 19 18 18 19 18 18 19 18 18 18 18 18 18 18 18 18 18 18 18 18	48600600000600660	£ a. d. 187 11 0 1187 11 0 1187 11 0 1148 13 0 1146 13 6 1144 11 6 1149 2 6 1137 15 0 1132 11 0 1132 11 0 1132 11 0 1132 11 0 1131 2 6 6 115 11 0 113 17 0 113 17 0	£ n. d. 10 11 6 6 9 17 0 9 14 0 0 9 18 0 0 9 18 18 0 8 18 0 6 6 8 19 0 7 11 0 6
55 60 65 70 75 80	230 1 5 202 14 4 171 14 2 142 2 6 114 4 7 81 14 10	35 36 37 38 39 40	199 194 191 187 183 179	11 11 8	660060	21 12 21 4 20 16 20 7 19 18 19 9	00000	149 9 145 19 149 5 138 18 135 13 139 9	0	19 2 11 16 11 11 11 5 11 0 10 15	060600	110 3 6 107 11 0 104 19 0 102 7 6 99 15 0 97 1 6	7 8 0 7 4 6 7 1 0 6 17 6 6 14 0 6 10 6

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All transactions under this act are directed to be conducted through the medium of a Savings Bank; but it is made lawful for any persons, in a place where such an institution does not exist, to establish a society for carrying the provisions of the act into execution.

BANKRUPT AND BANKRUPTCY.—A bankrupt, in the modern acceptation of the term, is a person who, either from the want of sufficient property, or from the difficulty of presently converting what he possesses into money, is unable to meet those demands of his creditors which the law gives them the power of instantly enforcing, and who has committed some act indicative of the situation in which he is so placed. It is in the latter particular that a bankrupt differs from one who is insolvent. A man may, were his affairs examined, be found unable to pay his debts; but if his creditors are either ignorant of the circumstance, or knowing it, trust to the return of prosperity, no one is injured, no one's claim is resisted, and there is no necessity of applying the sweeping remedy of the Bankrupt Laws. But when by resisting or evading the demands of creditors, or by the other acts provided for in the bankrupt laws [Acrs or Bankruprev], a man has distinctly shown to the world that he has not wherewithal to meet the just demands on him, it has to the world that he has not wherewithal to meet the just demands on him, it has been deemed, in some cases, necessary for a special law to step in and lay its hand upon the property of every description belonging to the debtor, in order that particular creditors may not, through an expeditious adoption of the ordinary remedies of the law (suggested perhaps by superior means of knowing the bankrupt's circumstances), sweep away the whole in full payment of their debts, and thus acquire an advantage over less fortunate creditors beyond the just reward of their activity. To accomplish this end, a bankruptcy code appoints all the property of every description belonging to a debtor to be placed in the hands of trustees, to be by them converted into cash, and then to be distributed among the ordinary creditors in proportion to the amount of their respective debts. It is a principle of the commercial bankruptcy systems of the United Kingdom, that after a sufficient time has been allowed for all the resources of the bankrupt to be investigated, and his property realized for behoof of his creditors, if he has conducted himself with candour and integrity, he is protected from their farther prosecution, and left free to recommence the pursuit of wealth, untrammelled by any obligation to them previous to his bankruptcy.

In Eremand, the laws of commercial bankruptcy were consolidated by statute 6 Geo. IV. c. 16

IN ENGLAND, the laws of commercial bankruptcy were consolidated by statute 6 Geo, IV. c. 16 and were amended by the act 1 & 2 Wm. IV. c. 56, which created a new tribunal in bankruptcy, and again consolidated and amended in 1849, by 13 & 13 Vict. c. 106. [Bankburptcy, Court or]. The old laws of Bankruptcy and Insolvency are entirely superseded. See Bankburptcy. See MAO may become bankruptcy—By § 2 of the former statute, the commercial persons who may

be subjected to the bankruptcy code are thus enumerated: "All bankers, brokers, and persons using the trade or profession of a scrivener, receiving other men's monies or estates into their trust or custody, and persons insuring ships or their freight, or other matters, against perils of the ses, warehousemen, wharfingers, packers, builders, carpenters, shipwrights, victualists, keepers of inns, taverns, hotels, or coffee-houses, dyers, printers, bleachers, fullers, calenderers, cattle or sheep salesmen, and all persons using the trade of merchandise by way of bargaining, exchange, bartering, commission, consignment, or otherwise, in gross or by retail; and all persons who, either for themselves or as agents or factors for others, seek their living by buying and selling, or by buying and letting for hire, or by workmanship of goods or commodities, shall be deemed traders liable to become bankrupt: Provided that no farmer, graster, common labourer, or workman for hire, receiver-general of the taxes, or member of, or subscriber to, any incorporated, commercial, or trading companies, established by charter or act of Parliament, shall be deemed as such a trader liable by virtue of this act to become bankrupt: There is here a distinction between two classes—those who belong to some specified commercial profession, and those who in general carry on any description of trade. It is ruled that the amount of the trade is not to be taken into consideration if the party show a disposition to contract with all comers; but occasional acts of buying and sellthose who belong to some specified commercial profession, and those who in general carry on any description of trade. It is ruled that the amount of the trade is not to be taken into consideration if the party show a disposition to contract with all comers; but occasional acts of buying and selling which spring incidentally from other pursuits, are not included,—as where a schoolmaster sells books to his own pupils, or a person who keeps hounds buys dead horses and sells the skins and bones, or one who has purchased more of an article than he finds use for sells the surplus. Where the business of brick-making is carried on as a mode of enjoying the profits of a real estate, it will not make the party liable to the bankrupt law; but where it is carried on substantially and independently as trade, it will do so, and there is no difference whether the party is a termer or entitled to the freehold. The same general doctrine applies to the case of a person manufacturing alum, burning lime, or selling minerals from his own quarry? (Henky, 4, 5, 5). Where an executor merely disposes of his testator's stock, it does not bring him within the act, though he add ingredients to make it marketable; but it is otherwise if he increase the stock and continue to sell. It is not necessary that the trade be conducted for England, it is sufficient that the bankrupt trade to England. The persons excepted eloy their privilege only in the capacity assigned to them in the act; armers and graniers are liable if they trade. Buying and selling bank stock or government securities, is considered as no trading within the statute. "Drawing and redraws which is a first privilege only in the capacity assigned to them in the act; armers and graniers are liable if they trade. Buying and selling bank stock or government securities, is considered as no trading within the statute. "Drawing and redraws by the exchange, is a trading; but a person's merely drawing bills on his own account, and apping for their being discounted with interest, and borro

Petition.—A trader who has committed an act of bankruptey is made bankrupt on the petition of one or more creditors. It a single creditor or a company petition, the debt must amount to £80; if two crecitors, to £75, and if three or more, to \.100; and "every person who has given credit to any trader upon valuable consideration for any sum payable at a certain time, which time shall not have arrived when such trader conmitted an act of bankruptcy, may so petition and ioin in petitioning as aforeasid, whether he shall have any security in writing or otherwise, for such sum or not" (6 Geo. 1 V. c. 16, § 15). "The debt must be due both in law and equity; due to the petitioning creditor alone, unless he be a co-assignee or co-partner; it may be on account, if the creditor swart o a sufficient balance, or a sum awarded, nowithstanding a bill filed to set aside the award, or an attorney's bill though not signed or delivered; or the debt of a surety. But not a mere security for a contingent demand, nor costs recoverable only a statement, nor damages for a tort before judgment, nor a debt for which the debtor is mescution, nor a cross-acceptance, unless the creditor have padd his own; nor can the husband petition alone on a debt due to his wife dam sola, unless it be a bill or note. Of course, the debt must not be bad for illegality. If was once held, that a debt barred by the statute of limitations is sufficient, unless perhaps where the objection is taken by the bankrupt himself, yet the proof such a debt is disallowed. A debt will be sufficient, though the debtor have been insolvent, and it was included in his schedule; or though a security of a higher nature have been insolvent, and it was included in his schedule; or though a security of a higher nature have been lassolvent, and it was included in his schedule; or though a security of a higher nature have been lassolvent, and it was included in his schedule; or though a security of a higher nature have been lassolvent, and it was included in his schedule; or though

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somers quality by taking the cash. The commissioners of the Court of Bankruptcy take a general sash on entering on their office. The petitioning creditor must attend before the commissioners, after that inquiry, splings the party bankrupt. If the trade tends to the commissioners, after that inquiry, splings the party bankrupt. If the trade intend to dispute the commissioners, after that inquiry, splings the party bankrupt. If the trade in tends to dispute the commissioners, after that inquiry, splings the party bankrupt. If the tends to Europe, and within a year (or le within the United Kingdom, within three if he be elsewhere in Burope, and within a year (or le within the United Kingdom, within three if he be elsewhere in Burope, and within a year (or le within the United Kingdom, within three if he be elsewhere in Burope, and within a year (or le within the United Kingdom, within three if he be elsewhere in Burope, and within a year (or le within the United Kingdom, within three if he be elsewhere in Burope, and within a year (or le within the United Kingdom, within three if he within the within the provisional and the provisional secondary to the spling three provisions and the provisional assignment, if he has been thought in crossary to make and in country bankrupted in the provisional assignment, if he has been thought in crossary to make a fine provisional and the provisional assignment in the first assignment of this principle, all transactions by which the bankrupt covered or allemated his property in make many with the provisional and the provisional assignment of the principle of the provision of the fifth of the fast against thin, and all necessary to make a common of the fifth of the fast against thin, and all necessions and attachment against his health and the provision of the fast against thin, and all necessions and statement shall have issued, before the delivery to be altered in the bankrupt to a with the power of the fast against thin, and of the provision of the bankrupt in the provision of

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bot to be performed within one week after the contract, or where the stock hought or sold was not actually transferred or delivered in pursuance of such contract; or shall, after an act of bank-ruptey committed or in contemplation of bankruptey, have destroyed, altered, mutilated, or failed, or caused to be destroyed, altered, mutilated, or failed, and or the books, papers, within the commission, such bankrupt being privy thereto, or aftered his creditors are the commission, such bankrupt being privy thereto, or afterwards knowing the same, shall not have contained to the value of £10 or upwards; or if any person having proved a false debt under the commission, such bankrupt being privy thereto, or afterwards knowing the same, shall not have desicated the same to his assignose within one ment after such knowledge. "A certificate in on an insolvent act, or who has compounded, is restricted in its operation (unless the estate produce after a such controlled to the produce of the produce of the such controlled to the con

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54 Geo. III. c. 137, § 1. "If any person, subject to the laws of Scotland, shall happen to be forth of that part of the territory of the United Kingdom, or not liable to be imprisoned by being in the sanctuary, or by reason of privilege or personal protection, a charge of horning executed against him, together with either an execution of any of his seffects not loosed or discharged within fifteen days after the date thereof, or an execution of poinding of any of his moveables, or a decree of adjudication of any part of his heritable estate, for payment or security of debt, shall, when joined with insolvency, be held a sufficient proof of legal bankruptcy, and equivalent to the description of notour bankruptcy, given in the act of the Parliament of Scotland before meationed, made in the year 1696; and it is hereby declared, that such insolvent debtor shall, from and after the period when both the charge of horning against the person, and one or other of the said diligences of arrestment (not loosed or discharged as aforesaid) or pointing have been executed, or decree of adjudication obtained, be holden and deemed a legal or notour bankrupt, and every person, whether he be out of Scotland or not, whose estate has been or shall be sequestrated under the authority of any of the acts before recited, or of the present act, shall in like manner be holden and deemed a notour bankrupt in all questions upon the act 1696, from and after the date of the first deliverance on the petition to the Court of Session for awarding the sequestration." The latter part of this enactment is made applicable to sequestrations under the late act (2 & 3 Vict. c. 41, § 25). Horning and caption is a form of execution against the person, now in comparative disuse, since a more brief method of execution was provided by the act 1 & 2 Vict. c. 114, a warrant to imprison in terms of which, has the same effect in rendering bankrupt, as the superferences on creditors, whether by conveyance or security, null, if granted after the bankru

BANKRUPTCY, COURT OF, IN ENGLAND. Previously to the passing of 1 & 2 Wm. IV. c. 56, the sole jurisdiction in bankruptcy was vested in the Lord Chancellor, who exercised it by issuing a special commission in each individual case. By that statute, a court was appointed, having one chief and three puisne judges, six commissioners, two registrars, with deputy-registrars in number not exceeding eight, and official assignees not exceeding thirty in number (§§ 1, 9, & 22). The judges, or any three of them, constitute a court of review, which must always sit in public, "save and except as may be otherwise directed by this act, or by the rules and regulations to be made in pursuance hereof" (§ 2). Questions are brought before the court of review by petition, motion, or special case. according to rules which the judges are empowered to make from time to Questions are brought before the court of review by petition, motion, or special case, according to rules which the judges are empowered to make from time to time, with consent of the Lord Chancellor (§§ 3 & 1). The commissioners are formed into two subdivision courts, each consisting of three; and any one or more of them possesses the powers formerly exercised by commissioners of bank-ruptcy appointed by special commission (§§ 6 & 7). [Commissioners of bank-ruptcy appointed by special commission (§§ 6 & 7). [Commissioners] A commissioner may adjourn an examination, to be taken either before a subdivision court or the court of review. He may adjourn a Proof of Debt [Proof] to be heard before a subdivision court, which "finally and without appeal, except upon matter of law or equity, or of the refusal or the admission of evidence, shall determine upon such proof of debt." If parties consent, the validity of a debt may be tried by jury before the chief, or one or more of the other judges, on an issue prepared under the direction of the commissioner or the subdivision court. If only one party apply, the granting of the issue is at the discretion of the commissioner or subdivision court, subject to appeal to the court of review (§ 30). The decision of a commission or or subdivision court, on any matter of law or evidence, or on the refusal or admission of evidence, may be appealed to the court of review, and thence to the Lord Chancellor (§ 31). If the court of review determine in any appeal touching any decision in matter of law, upon the whole merit of any proof of debt, the order is final as to the proof, unless an appeal to the Lord Chancellor be lodged within a month. His decision in such case is final, but if the appeal is on admission or refusal of evidence, it is remitted to the commissioner or subdivision court (§ 32). If the Lord Chanceller deem any matter of law or equity brought before him by appeal from the court of review, to be of sufficient difficulty or importance to require the decision of the House of Lords, or if both parties to any question before the court of review desire it to be determined in the first instance by that House, and not by the Lord Chancellor, his lordship or the court of review may direct the whole facts to be stated in the form of a petition of appeal to the House of Lords (§ 37). References or adjournments by a commissioner must be to the subdivision court to which he belongs, unless in the case of siekness of a member of the court, or for other good cause (§ 6). Appeals to the Lord Chancellor are heard by him only, and not by any other judge of the Court of Chancery (§ 3). The court of review has the power of deciding on petitions for reversal of the adjudication against the bankrupt [Bankruptvy], and may direct any issue as to a fact affecting the validity of the adjudication, to be tried by jury. If the verdict is not set aside on application to the court of review within a month after the trial, or if the adjudication be not set aside by the court of review, the adjudication or verdict is conclusive evidence that the party was or was not a bankrupt at the date of the adjudication—an appeal lies to the Chancellor in matters of law or equity, or the refusal or admission of evidence only (§ 17).

In Scotland and Irreland there are no separate tribunals for administering the

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IN SCOTLAND and IRRLAND there are no separate tribunals for administering the bankrupt law. In the former country this duty is performed by the Court of Ses-

bankrupt law. In the former country this duty is performed by the Court of Session, in the latter by the Lord Chancellor, under whom there are two official commissioners (6 & 7 Wm. IV. c. 14, 7 Wm. IV. and 1 Vict. c. 48).

BARILE, an Italian and Sicilian liquid measure, the contents of which vary in different places from about 7 to 16 Imp. gallons.

BARILLA (Fr. Barille. Ger. Barilla. It. Barriglia. Rus. Socianka. Sp. Barrilla), an impure carbonate of soda, obtained by lixiviating the ashes of seaweeds. It is imported into the United Kingdom in considerable quantities from Spain, the Canary Islands, and Sicily, and in smaller parcels from the East Indies. The finest is brought from Alicant, near which it is prepared from the Salsola sativa of Barilla. and the Salier, two plants which are extensively cultivated for that pur-The finest is brought from Alicant, near which it is prepared from the Salsola sativa or Barilla, and the Salier, two plants which are extensively cultivated for that purpose in Valencia and Murcia. It is brought to us in hard porous masses. The best quality is of a blueish-gray colour, while that which is made from other plants is of a colour approaching black, and of greater specific gravity than the former. The value of barilla depends upon its purity. It usually contains from 16 to 24 per cent. of its weight of pure carbonate of sods, and occasionally 30 per cent. It is consumed in the arts,—particularly in the manufacture of soap and glass, and in bleaching; but it is now much less used than formerly, on account of the cheapness with which soda is obtained from common salt. About 70,000 cwts. are at present entered annually for home consumption, which, notwithstanding a great reduction of duty, is less than one-third of the quantity formerly required. It is chiefly used in Ireland. chiefly used in Ireland.

A drawback is allowed on the barilla used in bleaching linen (4 & 5 Wm. IV.

A drawback is allowed on the barilla used in bleaching lines (4 & 5 wm. 1 v. c. 89, § 14).

British Barilla, or Kelp, is a still more impure alkali, formerly made in large quantities in the Hebrides, Orkney, and Shetland, by burning sea-wrack (mostly the Fucus vesiculosus). It contains only from 3 to 8 per cent. of pure carbonate of soda. The kelp manufacture has been comparatively trifling since the abolition of the duties on sait, and the reduction of those on barilla.

BARK the rind or covering of a tree. A variety of barks occur in compared.

BARK, the rind or covering of a tree. A variety of barks occur in commerce, but only that of the oak will be noticed in this place. Some others, as cinchona or Peruvian bark, cork, cinnamon, cassia, and quercitron, will be described under

their respective heads.

their respective heads.

Oak Bark (Ger. Eichenrinde, Lohe. Du. Run, Runne. Fr. Tan Brut, Ecoros de Chine. It. Soorsa di Quercia, Corleccia della Quercia. Sp. Cortesa de Encina. Por. Casca do Carvalho. Rus. Dubowui Kord) is the chief substance used for tanning leather. Its quality varies according to the age of the tree, and the season when it is cut; and Sir H. Davy discovered that tannin is more abundant in the bark of young than of old ones. It is likewise ascertained, that bark taken in the spring has 44 times the quantity of tannin, in a given weight, compared with what it would have if taken in winter. Of substances used for tanning, Sir Humphry states, that 84 lbs. of oak bark are nearly equal to 21 of common willow bark, 18 of elm bark, 11 of the bark of the Spanish chesnut, 74 of the bark of the Leicester willow, 3 of sumach, 24 of galls, and 1 of catechu, with respect to the tannin contained in them. tannin contained in then

In addition to the oak bark of British growth, nearly 40,000 tons are annually

imported, more than one-half of which is brought from the Netherlands, the remainder chiefly from Italy and other parts in the Mediterranean.

BARLEY (Fr. Orge. Ger. Gerste. It. Orso. Sp. Cebada), a well-known species of corn (Hordeum), of which the varieties are distinguished either from the number of rows of grains in the ears, or from the time of sowing them, into winter barley and spring barley. In this country, it is commonly sown in April, and from two to three bushels of seed are used for an acre. The produce varies greatly with seasons, culture, and soil. The more early it can be sown, the produce in grain is the surer, though the bulk in straw is less. 36 bushels per acre is generally held to be a medium crop, and 40 bushels a good crop. The medium weight of the common, or two-rowed barley (H. distiction), is about 52 lbs the bushel. The principal consumption of barley is for malting. In the state termed pot or possi barley (having the external coat of the seed rubbed off), it is employed largely in soups and cooling drinks; and the flour is used in many places for bread. In the south of Europe, it is consumed as food for horses. Bigg or Bere, an inferior variety of six-rowed barley, is cultivated in the north of Scotland, and other late places, on account of its ripening well when sown in spring; but its grains do not weigh account of its ripening well when sown in spring; but its grains do not weigh account of its ripening well when sown in spring; but its grains do not weigh so heavy, in proportion to their bulk, as the two-rowed kind. Barley is cultivated in a greater variety of climates than any of the other bread corns. In the United Kingdom, the best is raised in Essex, Norfolk, and Suffolk, where large quantities are produced and malted for the London market. [Corn Trade.] BARM. [YEAST.] BARQUE. [Ship.] BARRATRY is any fraudulent or other unlawful act committed by the master or mariners of a ship, without consent of the owner and tending to his interest.

BARRATRY is any fraudulent or other unlawful act committed by the master or mariners of a ship, without consent of the owner, and tending to his injury;—
"as by running away with the ship, wilfully carrying her out of the course of the voyage prescribed by the owners, sinking, or deserting her, embezzling the cargo, smuggling, or any other offence, whereby the ship or cargo may be subjected to arrest, detention, loss, or forfeiture" (Marshall, 519). In other countries it comprehends those faults of ignorance, unskilfulness, or rashness, by which loss may be occasioned; but in Britain it is limited to intentional offences against the owners, and it has been decided, that an act done with the privity of the owners, though without that of the proprietor of the cargo, who was the person insured, is not barratry (I. T. R. 323). If the shipmaster be the owner, he cannot be guilty of barratry. It is not essential that the act be done for the profit of the master or the mariners, and so it is barratry to sail out of port in breach of embargo, in consequence of which the owners sustain a loss in seamen's wages and provisions by detention (Robertson and so it is parratry to sail out or port in brack of embargo, in consequence of which the owners sustain a loss in seamen's wages and provisions by detention (Robertson v. Ewer, I. T. R. 127). It does not affect the act that it was designed to benefit the owner. "With respect to the owner of the ship or goods," says Lord Ellenborough, "whose interest is to be protected by the policy, it can make no difference in the reason of the thing, whether the prejudice he suffers be owing to an act of the master, induced by motives of advantage to himself, malice to the owner, or a disregard to those laws which it was the master's duty to obey, and which (or it would not be barratry) his owners relied upon his observing." And it was accordingly decided, that where a master had general instructions to make the best purchases with despatch, this would not warrant him in going into an enemy's settlement to trade (which was permitted by the enemy), though his cargo could be more speedily and (which was permitted by the enemy), though his cargo could be more speedily and cheaply completed there; but such act, in consequence of which the ship was seized and confiscated, was barratrous (Earle v. Roucroft, 1806, 8 East. 125). A general freighter is held owner for the time, and barratry may be committed against him, though with the sanction of the shipowner. On the same principle, the owner cannot recover as for barratry for what is done by order of the charterer, and it was held, that if the owner of a ship let to freight takes the command of her, and willingly runs her ashore, this is barratry against the freighter (Seares v. Thornton, 7 Taunt. 627). Most descriptions of barratry are punished as crimes. By 33 Geo. III. c. 66, § 8, the captain of any merchantman under convoy, wilfully disobeying the signals or instructions of the commander of the convoy, or deserting without notice or leave, is liable to imprisonment not exceeding a year, or to a penalty not exceedagnals or instructions of the commander of the convoy, or deserting without notice or leave, is liable to imprisonment not exceeding a year, or to a penalty not exceeding £500. By 7 & 3 Geo. IV. c. 30, for consolidating the laws of England as to malicious injuries to property; maliciously setting fire to, or destroying any vessel, whether complete or unfinished, and maliciously setting fire to a vessel to prejudice the owner, or the owner of goods on board, or an underwriter, are respectively, by § 9, made punishable (in England) with death. Barratry is one of the losses covered by insurance, and the owner may thus protect himself against the act of the master and sailors appointed by himself. "If the captain be the insured, no agreement on the

art of the insurers can make them liable for barratry committed by himself; but part of the insurers can make them liable for barratry committed by mimself; but they may be liable in such case for the barratry of the sailors in which he has no part" (Marshall, 521). It is the duty of the owner to prevent as far as he may the misconduct of the master; and if the former appear to have acted with gross negligence, the underwriter is not liable. Nor will this last be liable for loss which

negligence, the underwriter is not liable. Nor will this last be liable for loss which is the undoubted consequence of the barratry, unless it happen within the time prescribed by the policy for the duration of the risk. (Park on Insurance, 137-158. Marshall on Insurance, 138-538.)

BARREL, a round wooden vessel formed so as to be stopped close; also a measure of capacity. The beer-barrel equal 36 imperial gallons. The barrel of flour is 196 lbs. avoirdupois. In Ireland the barrel of wheat, pease, beans, and rye, equal 20 stones each of 14 lbs.; the barrel of barley, bere, and rapeseed, equal 16 stones; the barrel of cate is generally 14 stones; the barrel of malt equal 12 stones; the barrel-bulk, in shipping, is a measure of capacity for freight, equal 5 cubic feet; and 8 barrel-bulk, or 40 cubic feet, equal 1 ton measurement.

BARRIQUE, a French provincial liquid measure, equal in Bordeaux to about 50\frac{1}{2}\$ imperial gallons; in Nantes, 52\frac{3}{2}\$; in Rochelle, 38\frac{3}{2}\$; in Rouen, 43; in Montpellier, for wine, 5\frac{1}{2}\$, and for oil, 7\frac{1}{2}\$ imperial gallons nearly.

BARTER is the exchange of one species of merchandise for another without reference to a money standard of value. Cases of pure barter are now of rare occurrence.

Barter in Commercial Arithmetic is an application of the rule of Proportion to the exchange of one commodity, of which both the rate and quantity are fixed, for another, of which either the rate or the quantity are alone fixed. As the value of the goods exchanged are equal, it is obvious that the product of the quantities multiplied into their respective rates will be also equal. Hence

the following

Rule: Multiply the given quantity and rate of the one commodity, and the product, divided by the
rate of the other commodity, gives the quantity sought; or, divided by the quantity, gives the rate.

BARWOOD, a red dye-wood produced in Angola and other places in Africa. Only a small quantity is imported into the United Kingdom.

BARYTES, a ponderous earthy mineral, which is found both massive and crystallized; it is of various colours; and is both transparent and opaque. Sp. gr. 45. It is a very widely diffused substance. Chief localities, Dufton in Cumberland, Bohemia, &c. The purely white varieties are ground, and used as a pigment, either alone or mixed with white lead; but it is otherwise of little value. (Phillips' Geology of Mineralgay) BASKETS (Fr. Corbeilles. Ger. Körbe. It. Paniere. Por. & Sp. Canastas)

are well known articles, made of willows, twigs, rushes, or splinters, or some other slender bodies interwoven. In England, the osier willow (Salix Viminalis) is recognised as a most useful material for basketwork of all descriptions. The finer kinds of baskets are formed of the twigs of another species of willow; but what is called wickerwork is always made of osiers. See BASKET RODS.

BASSA, a liquid measure of Verona nearly equal to an imperial gallon.
BAST, the inner bark of the lime tree, is a material largely used in Russia for

matting and cordage.

BATMAN, an oriental weight. [MAUND.]

BATTA, a term used in India to denote a per centage, or allowance. Thus the Sicca rupee is said to bear a batta of 16 per cent. against the current rupee, as 100 Sicca rupees = 116 current rupees. Batta also denotes an allowance made to the East India Company's military officers in addition to their pay.

BATTENS, pieces of fir or pine timber used for floors, and as a ground for laths. They are always at least 6 feet long, and generally not exceeding 7 inches broad, and 23 inches in thickness when imported. The best are from Christiania; the worst from America.

BATTEN-ENDS are pieces under 6 feet in length.

BATZE, a small base silver coin in Switzerland and some parts of Germany,

worth about three halfpence sterling.

BAVARIA, a kingdom in the S.W. of Germany, and, next to Austria and Prussia, the most important of the German States. Area, about 30,000 British square miles. Population, 4,315,469. It is subdivided into eight provinces. Capital, Munich, pop. 75,000. The government is a limited monarchy, with chambers of councillors and deputies, regulated by a deed of constitution of May 26, 1818.

Bavaria is composed of two territories, which are separated from each other by the interposition of the Baden and Hesse Darmatadt possessions. The larger, called the Territory of the Danube and Maine, extends from lat. 47° 19′ to 50° 41′ N., and from long. 8° 81′ to 13° 47′ g., and comprehends seven of the eight provinces. This country is mountainous and woody towards the south;

rising in the direction of the Alps, and containing a number of lakes and marshes, the grounds adjoining which are only now being brought under tillage. To the northward are rich and extensive plains until we reach the Danube, beyond which it is again mountainous and woody. The division called the Territory of the Rhise, is a small but densely inhabited country, extending from lat. 48° 57′ to 48° 50′ N., and from long. 7° 6′ to 8° 31′ E. Bavaria is essentially an agricultural country, and its soil, though indifferently cultivated, is in general fertile. Wheat, rye, harley, and casts, are the chief objects of culture; next to which are the vine and hop plant: considerable attention is likewise given to fiax, hemp, fruit, liquorice, and madder; and of late, the rearing of the silk-worm has been attempted with partial success. The chief mineral productions are iron, salt, and coal; but quicksilver, gold, silver, cobalt, and some other metals, are likewise found. Manufacturing industry is mostly diffused over a number of small dealers. The principal article is coarse linen; the others are woollens, worsted hose, cottons, hardware, arms, beer, toys, leather, paper, glass, porcelain, and straw-platting. A favourable impulse has lately been given to manufactures by the institution of polytechnic societies and mechanic schools.

The roads of Bavaria extend upwards of 5000 miles; but they are generally bad; and there are few complete canals of any great magnitude. The improvement of the means of communication has of late, however, begun to attract attention. A canal on a large scale is now in progress for joining the Danube and the Rhine, by connecting Dietfurth on the Altmuhl, an affinent of the former, with Bamberg on the Maine, a distance of about 112 British miles: it is estimated by former, with Bamberg on the Maine, a distance of about 112 British miles: it is estimated to cost nearly £500,000. In 1835, a railroad with steam carriages was established between Nuremberg and Furth; and in 1838, a regular steam-commun

operations are still one of its principal sources of wealth: it also carries on an extensive transite trade, and is celebrated as a wine depôt.

Measures and Weights.—In Munich, the ell = worth about 2s. 04d., and the par of exchange 32½ Imp. inch; the wine eimer of 00 mass = 8-12 with London, 9 fl. 50 kr. per £l. But in exImp. galls; the scheffel of 6 metzen or 12 viertels = 9-28 Imp. bushels; and the center or quintal of 5 stones or 100 pounds = 86 kilogrammes or 123½ ibs. avoird. Gold and sliver are
weighed by the Cologne mark, here reckoned
at 300½ troy grains.

These measures and weights have lately been
rendered general throughout Bavaria. In the
former system of Augsburg, the traders' or lost
incomers, yether of Augsburg the traders' or lost
imp. palls; the schaff of 8 metzen = 5-65 Imp.
bushels; 100 lbs. heavy weight = 108-30 Imp. bushels; 100 lbs. heavy weight = 108-30 Imp.
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BAY, a celebrated tree (*Laurus nobilis*), a native of Barbary, of the south of Europe, and of Asia. It attains a height of 20 or 30 feet. The leaves are smooth, evergreen, lanceolate, and wavy at the margin; and afford, when bruised or burnt, a grateful aroma, which occasions their employment for culinary purposes. But the part chiefly valued is the fruit or berry, which is small, ovate, dark purple-coloured, aromatic, and bitter. It has long been used in medicine as a stimulant and carminative. The husks of the berries contain a great quantity of volatile oil; and the kernels furnish by expression a fat greenish oil, which is much em-ployed in embrocations. Bay-berries and oil are imported into the United Kingdom from Italy and Spain.

BAZAAR (in Persian a market), a term used in Persia, Turkey, Egypt, and India to distinguish those parts of towns which are exclusively appropriated to

trade. The principle of the oriental bassar is association for facility of reference; all the shops of a city are placed together; and the different trades and occupations are severally collected in different parts of the bassar, instead of being indiscriminately mingled as in our streets. Thus the saddlers are found to occupy one passage, the pipemakers another, and so on. The great bassars consist of a connected series of these passages, or lanes, vaulted with high brick roofs, surmounted by domes which admit a subdued daylight; and those of a superior description are sometimes decorated with naturings. The passages are compared of a surject of reseases or stalls decorated with paintings. The passages are composed of a series of recesses or stalls, the floor of which is raised from two to three feet above the ground. These rethe floor of which is raised from two to three feet above the ground. These recesses, which are entirely open in front, are scarcely more than closets; but in the more respectable parts there is generally a door in the back-wall which leads to another apartment that answers the purpose of a store-room. The front part is the shop, on the floor of which the merchant sits with his goods so placed that he has seldom occasion to rise, which, if he is a Turk, he rarely does without manifest reluctance. Long bargaining is common, and an apparent indifference is exhibited both by buyer and seller; the latter, as he sits smoking his pipe, being indeed the very personification of luxurious repose. Not only trades, but handicraft employments are carried on in the baxaars. The stocks of the individual dealers are seldom of much value, but an imposing effect is produced by the exhibition of the whole in a connected form, whence arises the splendid appearance of the oriental dom of much value, but an imposing effect is produced by the exhibition of the whole in a connected form, whence arises the splendid appearance of the oriental bazzars. Business commences and terminates with daylight, and none of the shop-keepers or artisans reside in them. Wholesale dealers have no open shops in the bazzars, but they have warehouses in them, or in their vicinity.

In this country, especially in London, the term bazzar is commonly understood to mean an assemblage of shops or stalls under cover, but these are less properly bazzars than Paternoster Row with its books, Monmouth Street with its ald clothes

Holywell Street with its old clothes. BEACON. [Buoy. LIGHTHOUSE

BEACON. [Buoy. Lighthouse.] BEACONAGE, a charge for the use and maintenance of a buoy, lighthouse, or

other beacon stationed for the use of navigators.

other beacon stationed for the use of navigators.

BDELLIUM, a gum resin of doubtful origin, produced in Persia and India. It resembles myrrh, for which it is sometimes substituted. It is now disused in Britain, but is to be found intermixed with gum-arabic.

BEADS, small globes or balls made of glass, ebony, pearl, or other materials, and used as necklaces. They are also employed by Roman Catholics for the purpose of counting a series of prayers called the Rosary.

BEANS (Fr. Fives. Ger. Bohnen. It. Fave. Por. Favas. Rus. Boobil. Sp. Habas), the grain of a leguminous plant (Fabs vulgaris), of which there are two general classes,—those which are cultivated in gardens, termed garden or white beans, and those which are cultivated in the fields, termed field or gray beans. Of these last, the principal are the horse bean and the tick; the former is the more hardy, the latter is generally of better quality, and more productive.

The bean, though an exhausting crop. is recarded as well suited to prepare the land for wheat

The bean, though an exhausting crop, is regarded as well suited to prepare the land for wheat or barley. It is sown in February or March; and except where the dibbling process is resorted to, about 4 bushels of seed are required to the acre; 40 bushels to the acre are regarded as a great crop; 30 bushels are a full and satisfactory one; and probably the average produce of the kingdom does not amount to 24 (Low's Agriculture). The field bean is chiefly applied to the feeding of horses, hogs, and other domestic animals. [Corn Trade.]

BEAVER. [FUR TRADE.]

BEAVER. [FUR TRADE.]

BECHE DE MER, called also tripang, or sea-cucumber, is a very peculiar kind of sea-slug (Hotothurion), which, after being gutted, pressed, dried in the sun, and smoked, is regarded by the Chinese as a luxury, much in the same way in which we regard caviare. It is carried to China from almost every island of the Eastern Archipelago, from Australia, and of late from Mauritius and Ceylon. The value, as may be seen by the Canton Price-current, varies according to quality, from 6 dollars up to 50 per pecul; and the natives alone for the most part are judges of its worth. The principal importation into China is by the junks, and the quantity is so considerable that the fishery of it, especially on the coast of New Holland where it abounds, might probably be entered into with advantage by Europeans. (Edinburgh Cabinet Library, No. XX. China.)

BEECH, a beautiful and valuable tree (Fagus sylvatica), indigenous to most parts of Europe. It thrives best in rich soils and sheltered situations. The wood sof close texture, though not so strong as the grained timbers against a cross

parts of Europe. It thrives beet in rich sold and mattered attentions. It thrives beet in rich sold and attention is of close texture, though not so strong as the grained timbers against a cross strain. When exposed to alternate drought and moisture soon decays, but lasts long when kept constantly wet. Beech is used for machinery, furniture-work,

terews for workmen's benches, presses, stocks and handles of tools; also for keels of ships, boats, and for planking in parts kept constantly under water. It is, however, little used in building, and though easily turned, it is not adapted for hollow vessels, as it is apt to split when quickly dried after being wet. Beech is also liable to be attacked by worms, so that it is not extensively employed. The small wood makes good charcoal, and the mast or fruit furnishes food for swine.

Bech nor Oil, a fat or greasy oil, resembling that from olives, obtained from the decorticated nuts of the beech tree. These yield, by pressure, about 15 per cent. of oil, and a larger quantity when aided by heat; the remaining cake is reckoned better food for cattle than common oil-cake.

BEEF (Fr. Beuf. Ger. Rindfeisch), the flesh of the ox, forms, in a salted state, a considerable article of exportation, especially from Ireland. In 1838 there were exported of the produce of the United Kingdom 42,161 barrels of beef and pork of the declared value of £148,403; about two-thirds of which were sent to the West Indies; and the remainder chiefly to Australia, British America, Mauritius, and India. In the same year 13,108 cwts. of foreign salted beef were imported; only a small part of which, however, was entered for home consumption.

The importation of fresh, or corned, or slightly salted beef for home consumption is prohibited.

The importation of fresh, or corned, or slightly salted beef for home consumption is prohibited by 3 & 4 Wm. IV. c. 52, § 58-60; and, by 3 & 4 Wm IV. c. 57, § 43, foreign beef exported from the warehouse must be taken on board as merchandles only, and not consumed as stores.

A barrel of Irish mess beef contains 25 pieces, each of 8 lbs., or 200 lbs.; a tierce, 38 pieces, or 5M lbs.; a firkin, 25 pieces, each of 4 lbs., or 100 lbs.

BEEF-WOOD, the produce of a species of Casuarina, which grows in New South Wales, is a hard, close-grained, reddish wood, variegated with dark and white streaks. It is imported in logs of about 9 feet long by 13 inches broad; and is principally used in forming borders to work in which the larger woods are em-

BEER (Fr. Bière. Ger. Bier) is a fermented liquor, made from the malt of barley, and flavoured with hops. It may be called the wine of barley. A variety of kinds are made; those in use at present being distinguished by the names of Ale, Porter or Strong Beer, Table Beer, and Small Beer, which differ little except in strength, and in the mode of preparing the malt from which they are manufactured.

factured.

Ale is brewed from malt which has been dried by the application of only a slight heat, and is of a more sirupy consistence and sweeter taste than porter. The best kinds made in this country are the Scotch and Burton ales. Scotch ale is distinguished for paleness of colour and mildness of flavour; the taste of the hop never predominates; and it is perhaps more near to the French pale wines than any of the other ales that are brewed in this country: it is like them too the result of a lengthened fermentation. The general mode of charge is by the hogshead (= 14 barrels or 54 Imp. galls.), for which from £3 to £8 are paid according to quality. This ale is made chiefly in Edinburgh, also at Alloa and Prestonpans. Burton ale, brewed at the place of that name in Staffordshire, is prepared from the palest malt and hope, as, if it be not as pale as a straw it will not pass with connoisseurs. It is also distinguished for strength, flavour, and sweetness. It is usually charged by the gallon, as the sizes of the casks differ. Besides the Burton ales, those of Nottingham and Birmingham are sent to the London market.

Porter, or strong beer, is a potent fine liquor, transparent, and of a beauti-

Porter, or strong beer, is a potent fine liquor, transparent, and of a beautiful brownish colour. It is brewed in the same way as ale, with this difference, that in making malt for porter, a much higher temperature is applied, by which it is slightly burned, so that the wort got from it has a dark colour, and a peculiar bitter taste. Other substances, however, besides malt and hops, are known to be sometimes used to improve its flavour and appearance, though the use of such subsometimes used to improve its flavour and appearance, though the use of such substances is prohibited. Different kinds of porter are known in trade by particular names and marks. Mild beer is beer newly brewed; entire consists chiefly of that made expressly for the purpose of keeping; brown stout is a fine strong kind of porter: the degrees of strength are in some cases marked with an X (single X), XX (double X), and XXXX (treble X). For a fuller account of the different kinds of porter, see "Art of Brewing," Library of Useful Knowledge. The price of a hogshead varies, according to quality, from about £2, 12s. to £5, 2s.; namely, X, or stout, £2, 12s.; XXX, or brown stout, £3, 12s.; XXX, or double brown stout, £4, 4s.; imperial, £5, 2s. London is the chief seat of the manufacture, but Dublin porter is also celebrated. Of late years a general preference is given to mild ale instead of porter; and several of the most eminent London browers have had to change their manufacture to suit the altered taste of their customers. Small beer and Table beer are weaker liquors, made either by mixing a large proportion of water with the malt, or by mashing what is left after the porter or ale wort is drawn off, with a fresh quantity of water. The names of spruce beer, ginger beer, &c. are given to other inferior beverages, consisting of a saccharine liquor, partially fermented, and flavoured with peculiar substances.

The excise duties formerly levied on beer were abolished from and after October 10, 1830, by 1 Wm. IV. c. 51; but a considerable revenue is still derived from the licenses payable for the privilege of manufacturing and selling it, and from the duty on malt.

The Manufacture of Beer is regulated by different statutes. Brewers are required to take out a license from the excise, and to "enter" their premises under a penalty of £200, and forfeiture of the mash-tun and materials. No security is required for the license. Brewers are prohibited from having on their premises any raw or unmalted grain or corn, under forfeiture of the same, and a penalty of £200 (1 Wm. IV. c. 51). The adulteration of beer is also prohibited; and any brewer or dealer in beer having in his possession, making, using, or mixing with any worts or beer, any other articles than malt and hops, shall forfeit such articles and the vessels in which they are contained, and pay £200 for each offence. Druggists or others delivering to any brewer, or dealer, knowingly, any colouring other than unground brown malt, are subject to a penalty of £500 (56 Geo. III.

The license duty imposed on brewers shall be paid according to the quantity of malt used by them, reckoning a barrel of beer (36 Imp. galls.) for every two bushels of malt (6 Geo. IV. c. 81; 1 Wm. IV. c. 51).

The Sale of Beer in England is principally regulated by the acts 11 Geo. IV. and 1 Wm. IV. c. 64, 4 & 5 Wm. IV. c. 85, and 3 & 4 Vict. c. 61, the chief enactments of which say the following: of which are the following :-

I Wm. IV. c. 64, 4 & 5 Wm. IV. c. 85, and 3 & 4 Vict. c. 61, the chief enactments of which are the following:—

A party requiring a license for selling beer, ale, and porter, by retail, must produce to the officer of excise a certificate from an overseer of his locality, to the effect, that he is an actual resident in the house for which he claims, and stating the amount in which he is rated to the poor (3 & 4 Vict. c. 61, § 9); must enter into a bond to the commissioners of excise, with one surety of £30, or with two of £10 each, for the payment of any penalty or sum of money, not exceeding the amount of such £30 or £10 respectively, which shall be incurred for any offence against this act, by the party to whom such license shall be granted; and no person licensed to sell obser by retail, or not being a householder paying the poor-rates, shall be surety in any such bond (1 Wm. IV. c. 64, §§ 4, 5). By the late act, licensed retailers must enter all their premises with the excise, under the arrangements of the general excise act [Excise] (3 & 4 Vict. c. 61, § 9).

Every person applying for a license to sell beer to be drunk on the premises, to deposit with the commissioners a certificate of good character, signed by six rated inhabitants of the parish, none of whom shall be malisters, common brevers, or persons licensed to sell spirituous liquors or beer or cider by retail; but if there are not ten rated inhabitants in the place, the certificate of the majority of them to be sufficient. Such certificate to be signed by overseer as to rating, under a penalty for refusal of £5 (4 & 5 Wm. IV. c. 85, § 2, 3).

Duties on beer licenses under 1 Wm. IV. c. 64 repealed, and in lieu thereof there shall be payable for any license to sell beer off the premises, £0; and it censes obtained on false certificates to be void. Licenses under the said act not to authorise persons to hold licenses for sale of wine. Penalty or making or using false certificates £60; and licenses obtained on false certificates to be void. Licenses un

Account of the Number of Licenses granted for the Manufacture and Sale of Beer in the United Kingdom, together with the amount of Duty thereon, in the Year ended January 5, 1838.

BEE

	En	gland,	Scotl	land.	Irel	and.
	No.	Duty.	No.	Duty.	No.	Duty.
Brewers of strong beer not exceeding 20 barrels	8.998	£4,499	62	£31	29	£14
exceeding 20 and not exceeding 50	8,520	8,590	24	24	1	1
50 100	10,445	15,667	28	49	11	16
100 1000.	18,306			422		110
1000 barrels	1,597		114		146	1549
Brewers of table beer	14		90	63		
Retail brewers under 5 Geo. IV. c. 54	18	94		105		
Sellers of strong beer only, not being brewers	979	3,084	23	72	60	189
Beer retailers whose premises are rated under £20)	39,926	41,922	16,293	17,108	19,175	20,134
£20 or upwards	15,824	49,846	790	2,488	1,623	5,112
Retailers of beer, cider, or perry, under I Wm. IV.			20	PG	1	
To be drunk on the premises	39,902	125,691	44			8.0
Not to be drunk on the premises	5,291	5,556	100	1 44 3	44	96

The Exportation of Beer is regulated by 1 Wm. IV. c. 51, § 9-14. A drawback of 5s. is payable for every barrel of 36 imperial gallons exported to foreign parts. But before any debenture shall be paid for such drawback, the exported parts. But before any debenture shall make oath, before the proper officer of excise, that such beer or ale was exported as merchandise, and no part thereof for the ship's use; and that, according to the best of his knowledge and belief, the same has been brewed wholly from malt which has paid the duty of 2s. 7d. a bushel. He shall also specify in such eath the time when, and the place where, and the brewer, being an entered and licensed brewer for sale, by whom such beer or ale was brewed, and that the quantity of malt used in brewing was not less than 2 imperial bushels for every 36 gallons of such beer or ale. Penalty for false statements, £200, and the debenture is void.

The art of preparing ale and hear for warm alignments.

£200, and the debenture is void.

The art of preparing ale and beer for warm climates has now attained a high degree of excellence; but the quantity exported is inconsiderable, when compared with what is consumed at home. It is principally sent to the East and West Indies, Australia, United States, and Brazil. In 1836, 15,148 tuns (each of 216 gallons) were exported, of the declared value of £270,915; in 1837, 15,588 tuns, declared value, £273,122; in 1838, 18,327 tuns, declared value, £317,359.

By the Customs Tariff Act of 1853 the duty on beer and ale imported is £1 per barrel.

Historical Notice.—The use of a fermented liquor from barley is of high antiquity, not only in the north of Europe, but even in Spain and Egypt. Ale was a favourite beverage of the ancient Scandinavians, and it was an article of their belief that drinking large draughts of it formed one of the chief felicities of heroes in the Hall of Odin. In England, ale appears from a very early period to have been regarded as one of the necessaries of life; but down to the era of the Reformation, the use of wine was also very general;—it being both extensively manufactured from vines reared in the southern counties, and imported on a considerable scale from the Rhine and other parts. The decay of the ecclesiastical gardens at that time, however, and the greater encouragement then given to the growth of grain and the culture of hops, gradually led to the more extended use of ale, which, from the period just stated, may be regarded as peculiarly the national beverage of England.

of England.

In ancient times, ale was subject to a variety of statutory regulations in reference to its price and wholesomeness; but it was not made an exciseable commodity until 1643. The beer duties varied at different periods; and at length were abolished in Ireland in 1795, and in Britain in 1830. The rates levied betwirt 1802 and 1830, were 10s. per barrel (old measure) on strong beer, and 2s. per barrel on table beer, which yielded in the year 1839, in England, £3, 135,568; in Scotland, £79,414; in all, £3,205,932. The quantity brewed during the same year in Britain, amounted to 7,735,568 barrels, of which 6,060,247 barrels were strong beer. No record exists of the quantity made since the abolition of the duty; but there can be no doubt that it has very considerably increased.

In the same year (1830) in which the duties on ale and beer were renealed in Britain, by I Wm.

ably increased.

In the same year (1830) in which the duties on ale and beer were repealed in Britain, by I Wm. IV. c. 51, another act of even greater importance, not only to the traders in ale and beer, but to the community generally, received the sanction of the legislature. This was the act I Wm. IV. c. 64, already mentioned. Under its provisions, which came into operation on the 10th October 1830, any person could obtain a license to sell ale, beer, and porter by retail in England; their privilege being derived from an acties license costing two guineas, and renewable annually. Previously, the Justices of the Peace were alone empowered to grant licenses for the sale of malt liquor. The acts of 1834 and 1840 (4 & 5 Wm. IV. c. 85; and 3 & 4 Vict. c. 61) introduced some new regulations which ought perhaps to have been considered necessary from the first opening of

a new trade so Hable to be misconducted as that of the sale of fermented liquors. The act of 1834 also introduced a distinction in England between those who sold beer, &c. for consumption on their premises, and those who sold it only to be consumed elsewhere. Since the passing of the acts of 1830 and 1834, the number of licensed retailers has increased in every part of England; but it has now probably reached a point at which it will remain nearly stationary.

In Ireland and Scotland, the fermented liquor most commonly used is whisky, and the quantity of beer consumed is inconsiderable, compared with England. [Malx. Hors.]

of beer consumed is inconsiderable, compared with Engiand. [MALT. Hora.] 8

BEET, a plant, one species of which (Beta vulgaris) is distinguished by its large succulent root. Of this species the chief varieties are,—red beet, which has been long cultivated in our gardens for the table; white beet, extensively used in France and other parts of the Continent, for the manufacture of sugar [Sugar]; and field beet [Marger Wurzel] used as food for cattle. Another species of beet producing succulent leaves only (B. hortensis), forms one of the principal culinary vegetables of the peasantry of France, Germany, and Switzerland.

BELGIUM, a kingdom situated in the W. of Europe, betwixt lat. 49° 27' and 51° 31' N., and long. 2° 37' and 6° E.; and which, prior to the revolution of 1830, formed with Holland the United Kingdom of the Netherlands. It is bounded N. by Holland. E. by Prussis, S. by France, and W. by the North Ses. Area, excluding the

formed with Holland the United Kingdom of the Netherlands. It is bounded N. by Holland, E. by Prussia, S. by France, and W. by the North Sea. Area, excluding the portions of Luxemburg and Limburg, now subject to Holland, 11,351 British square miles. Provinces and population in 1839: Antwerp, 365,173; Brabant, 604,950; W. Flanders, 636,630; E. Flanders, 769,407; Hainault, 643,410; Liege, 400,780; Limburg, 151,617; Luxemburg, 167,885; Namur, 232,625; total, 3,972,937; of which nearly 300,000 are Germans and Dutch, the rest Belgians, that is Walloons and Flemings, belonging to the Greco-Latin stock and speaking a French dialect. Capital, Brussels; pop. in 1839, 104,713. Government, a constitutional monarchy, with a senate and bouse of representatives: the members of both obambers being with a senate and house of representatives; the members of both chambers being elected by those citizens who pay not less than 20 florins (33s. 3d. sterling) annually of direct taxes.

elected by those citizens who pay not less than 20 florins (35s. 3d. sterling) annually of direct taxes.

Belgium is in general a level country, except in the provinces of Liege and Namur, where the surface becomes irregular and in some parts hilly. The soil of the flat country is in most parts light and sandy; but is rendered exceedingly fertile by the constant application of manure, to obtain which the attention of the cultivator is especially directed to the rearing of cattle. The cilimate resembles that of the S. of England, but more variable; and the common objects of culture are wheat, rev, barley, oats, buckwheat, potatoes, turnips, hemp, flax, beck, hops, and chicory, with artificial grasses; a variety of fruits are also grown, and some tobacco. About 9-11ths of the country are under cultivation, and of the remainder, the greater part is occupied by forests, towns, roads, canals, and rallways, which cannot be deemed unproductive. The most highly cultivated provinces are those of the north and west, which in their flatness, freitly, dikes, and canals, closely resemble Rolland; and are so thickly inhabited as to present the appearance of one continuous village.

The mineral productions are numerous and abundant, particularly in the S. and E. portions of the kingdom, comprehending Hainault, Namur, Luxemburg, and Llege; and the working of mines constitutes a valuable branch of the national industry. Of the mineral products, the first in point of importance is coal, the extraction of which employed in 1853, 31,190 men; some produced 29,000,000 heetolitres, worth 32,000,000 francs. The three great centres of the coal mines are Mons, Charleroy, and Liege. Iron mines are numerous, especially the district between the Sambre and the Meuse; and in 1836, the quantity of prepared ore worked up was 456,000 tons, corresponding to double that quantity taken from the mines. Leaf is found in Liege, in Namur, and in Luxemburg, especially at Longrilly; copper in Hainault; beach of the same and the forth manufactures, selej

articles. Much of the rapid progress observable in almost every branch of industry of late years is due to the facilities and encouragements afforded by the government, but individual enterprise has been also conspicuous. Amidst many instances of this kind, there is one in particular so essentially national to Beigium, so identified with its prosperity, and of a celebrity so truly European, that it is impossible to leave it unnoticed. We allude to Mr John Cockerill of Liege, one of the most distinguished persons who has yet appeared in the manufacturing world. He is concerned in upwards of 50 manufacturing establishments; Germany, France, and Poland possess some of them; but the greatest number are situated in Belgium. Of these the most remarkable for its intrinsic qualities of vastness and solidity, as well from its being the seat of government, so to call it, of Mr Cockerill's scattered empire of mechanical enterprise, is that of Beraing, on the banks of the Meuse, near Liege, where no fewer than 3700 men are employed in coal-mines, iron-works, blast furnaces, and in the manufacture of steam-engines and other machines.

The internal commerce of Belgium is facilitated by magnificent rivers, particularly the Meuse and the Scheldt, the latter being navigable as far as Cambray in France. There are also numerous canals. We can only mention the great Northern Canal, from Neuss on the Rhine (in Prussia) by Venico on the Meuse to Antwerp, and with which communicate, near the Scheldt, the Lievre and Bruges canals; the Ostend and Dunkirk canals, reaching the sea at different points; the Brussels canal; and the Louvain canal. The railways, likewise, owing to the flaitness of the country, have been introduced with a success unknown even in Britain. According to a law passed in 1834, it was provided that a system of railroad abould be established in the kingdom which, having Mechilin for its centre, should lead towards the cast by Louvain, Liege, and Verviers, to the Prussian frontier; towards the north to Antwerp; toward

	Value	of Import	s into Belg	ium.	Value of Exports from Belgium.						
	1831.	1832.	1833.	1834.	1831.	1832.	1833.	1884.			
France	584,995	2,249,768	1,927,508	1,425,959	1,684,749	2,420,365	2,226,618	3,191,534			
Holland	404,419	348,399	730,426	1,073,436	281,826	321,765	708,046	712,274			
Towns, & Ger- }	448,474	1,166,399	1,284,820	1,064,743	1,188,953	1,288,684	862,425	1,484,344			
many. Great Britain				2,102,649	598,743						
Russia United States	54,463	300,434	224,850	180,044 (710,876	\	23,036	10,205	22,065 (57,500			
Cuba	327,802	1,215,723	935,722			28,641	85,084				
Hayti Brazil	280,763			399,367	120,000		10,984				
Other countries	269,383	492,772	645,110	531,211	43,454	37,196	129,153	114,754			
Total,	3,920,523	9,336,301	8,700,745	7,952,677	3,862,211	4,449,678	4,446,669	5,878,050			

especially the finer kinds, cotton manufactures and small wares, woollen cloths, siks, brass, cope per and power manufactures, and sait. A considerable portion of these goods, especially the yarus and cloths, are not intended for consumption in Belgium, but are sungiled across the French frontier; this is partly done by dogs trained for the purpose by being pampered in France, and half-staved and otherwise ill-used in the former country.

The bonding yards are at Antwerp, Bruges, Brussels, Courtray, Ghent, Liege, Louvain, Mechlin, Mons, Nieuport, Ostend, Ruremonde, Tournay, and Venico.

Belgium communicates with the sea by Antwerp, Ostend, and Nieuport, by the canal of Bruges to Oostburg, by the canal of Dunkirk to Furnes, by the canal of Chent to Terrouses, by this canal of Trimonde to Hulst, by the Scheldt from Flushing to Antwerp, by the same river and the canal of Willebreak from Brussels to Antwerp, and by the canal of Louvain and the Scheldt from Louvain to Antwerp. But the only seaports of any consideration are Antwerp and Ostend.

Anteerp, a strongly fortified and magnificent town, is situated in 51° 14′ N. and 4° 22′ E. on low ground, on the right bank of the Scheldt, where the river makes a considerable bend. Population in 1838, 77,162. It is about 45 mfles from the mouth of the Scheldt, reckning from Flushing, where vessels bound for Antwerp must take a Dutch pilot as far as Lillo. The river at Antwerp is about 400 yards broad, and large vessels may sail up to the quay, and into a large bann; the depth at low water in frunt of the city being from 32 to 42 feet. Its commerce is still considerable, though far below what it was in the fifteenth and sixteenth centuries, when it had a population of 200,000, and 9000 vessels annually entered its port. In 1829, 985 ships arrived; 680 in 1830; and only 382 in 1831; but since this last year the shipping has greatly increased, and in 1830; and only 382 in 1831; but since this last year the shipping has greatly increased and in 1830; and only 382 in 1831; but s

MEASURES, WEIGHTS, MONEY, FINANCES, &c.

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Measures and Weights.—The French metrical system was introduced in 1820.

The following old measures are still partially used:—The Antwerp silk all = 27.32 Imp. Inches, and woollon sil = 26.97 Imp. Inches; the Brabant all = 27.82 Imp. inches; the sam of 50 stoops = 324 Imp. gale; the veite = 41 Imp. galls; the veite = 41 Imp. gal

BELL-METAL, an alloy consisting of three parts of copper and one of tin. little zine is added to small shrill bells.

BEN-OIL, a fat or greasy oil procured by expression from the decorticated seeds of the Moringa pterygosperma, a tree which grows in Ceylon, Arabia, Egypt, and Ethiopia. It is inodorous, and does not readily become rancid; hence its excel-

and Linnopla. It is inodorous, and does not readily become rancid; hence its excellence for the manufacture of jamine, tuberose, and other scented oils.

BENZOIN, BENJAMIN, os FRANKINCENSE, is the concrete resinous juice of the Signas bensoin, a tree growing in Sumatra, Java, and Borneo. It is sometimes called a gum, but appears rather to be intermediate between resins and balsams. Benzoin is now chiefly employed to yield benzoic acid, and for other purposes in medicine. It is also used as a cosmetic, and to burn in censers in Roman Catholic churches.

Roman Catholic churches.

"Bensoin occurs in large masses, on which the impression of the reed mats is visible. It is quite dry, and easily pulverizable, of a brownish-red colour, spotted with clear red, and, in proportion to its fineness, has intermixed a larger number of tears (Bensos ampodaloides), resembling in size and form almonds, with an even fracture, having a greasy instre, and translucent; while the mass is opaque, uneven in its fracture, and occasionally porous. Its taste is awestish, balsamic, and resinous; its amell, especially when rubbed or kindled, pleasant and balsamic, Ep. gr. 1-68. The large masses, quite opaque, of a brownish or blackish colour, and destitute of white grains, is called bensoin in sorts." (Duncan's Dispensatory.)

Bensoro Acro is commonly extracted from bensoin; but it exists also in storax, the balsams F

of Peru and Tolu, and other substances. "The usual process consists in boiling finely powdered gum benzoin in a large quantity of water, along with lime or carbonate of potash, by which means a benzoate is formed. To the solution, after being filtered and concentrated by evaporation, nurtatic acid is added, which unites with the base, and throws down the benzoic acid. It is then dried by a gentle heat, and purified by sublimation" (Turner's Chemistry). Sublimed benzoic acid, or flowers of benzoics, which should alone be used for medical purposes, occurs in white medic-like prisms, of a flocculent appearance when in mass, with a soft, silky lustre; taste, at first sweetlah, but afterwards pungent; odour peculiar, and highly characteristic. Sp. gr. 0.657. It is scarcely soluble in water, but completely in alcohol.

BERGAMOT, the fragrant fruit of the Bergamot orange-tree (Citrus Bergamia), from the rind of which an essential oil of delicious quality is obtained, both by pressure and distillation. This oil or essence is limpid, fluid, and yellowish, with a smell resembling that of oranges. Sp. gr. 0.888. It is used as a perfume.

BERMUDAS. [WEST INDIES.]

BERRI, a Turkish road measure, equal 1826 Imp. yards.

BERRIES are soft and succulent fruits, having their seed lying loosely among pulp. A description of those chiefly imported will be found under the heads of bay, impiner, and yellow berries.

bay, juniper, and yellow berries.

BERYL, an ornamental stone, differing little from emerald, except in colour.

The emerald is green; all the varieties of other colours, tinged more or less yellow and blue, or altogether colourless, are beryls. Common form, the hexahedral prism; and blue, or altogether colourless, are beryls. Common form the hexahedral prism; transparent, translucent, or opaque; lustre, vitreous. Sp. gr. 275. Localities, Braxil, Siberia, France, and United States. Such varieties of beryl as are clear, transparent, and exhibit brilliant shades of sky-blue, or mountain-green, are denominated by lapidaries aqua marine, or precious beryl. They are principally brought from the Braxils, and occur in considerable masses. (Philips' Mineralogy.)

BETEL, an East Indian plant (Piper betel), the leaf of which, mixed with the fruit of the Areca palm (A. catechu), commonly called betel, or pinang nut, and fine lime [Chunan], forms a hot and acrid masticatory, in almost universal use in India and the Malayan Archipelago. The mixture is used by both sexes, and at all ages. It is said to be aromatic and stomachio, and also to produce intoxication in these not habituated to its use

in those not habituated to its use.

In those not habituated to its use.

The chewing of betel forms an important branch of eastern etiquette. Marsden states "this custom is universal among the Sumairans, who carry the ingredients constantly about them, and serve them to their guests on all occasions; the prince in a gold stand, and the poor man in a brass box, or mat bog. The betel-stands of the better ranks of people are usually of silver, embossed with rude figures. When the first salutation is over, the betel is presented as a token of politaness, and an act of hospitality. To omit it on the one hand, or to reject it on the other, would be an affront; as it would be likewise in a man of subordinate rank to address a great man without the precartion of chewing it before he spoke. All the preparation consists in spreading on the airle, or piper betel leaf, a small quantity of the chunam, and folding it up with a slice of the pinang-nut. Prom the mastication of these proceeds a jules which tinges the saliva of a bright red, and which the leaf and nut, without the chunam, will not yield. This hue being communicated to the mouth and lips is esteemed ornamental; and an agreeable flavour is imparted to the heath. The julies is usually (after the first fermentation produced by the lime), though not always, swallowed by the chewers of betch." (History of Sumatra.)

BETEL-NUT, or ARECA, forms an article of extensive commerce from port to port in India; and a very large quantity is annually carried to China. The nuts are seldom imported into Britain, though Mr Milburn thinks they might be of use in some ma-

nufactures, as they are employed in dyeing cottons in Coromandel and Malabar.

BEZANT, a gold coin so called from Byzantium, the ancient name of Constantinople, which, during the middle ages, furnished most of the European kingdoms with gold money. Bezants were the solids of the old scale; they were six to the ounce, and were in use till after the time of William Rufus. Bezant appears likewise to have been a term applied to all kinds of gold coin, and it was succeeded in

wise to have been a term applied to all kinds of gold com, and it was succeeded in the same general sense by the gulden or florin.

BEZOAR, an animal concretion highly valued in the East, where it is supposed to possess many extraordinary medicinal virtues. The greater portion is procured from the intestines of ruminating animals. The most highly valued is obtained from the stomach of the Capra aegagrue, or wildgoat of Persia. Bezoars have long fallen into merited disuse in Europe.

BILL OF ENTRY, a note of the particulars of goods entered at the Customhouse, delivered with certain duplicates to the collector or comptroller of the port, according to the terms of the Customs Regulation Act, of which an abridgment will be found under the head Customs.

will be found under the head Cusroms.

BILL OF EXCHANGE may be defined a written order directing one party to pay a sum of money to another—either the person who gives the order or some third party—at some day fixed or ascertainable. The individual who issues the order

is called the drawer; the person to whom it is addressed is called the drawee [Drawer and Drawer], until he consent to honour the draft or obey the order, after which he is called the acceptor [Acceptor]. The bill may be passed from hand to hand by delivery or indorsation, according to circumstances [Indorsation], and in the latter case, the person who makes over is called the indorser, and the person who receives the indorsee. He who is in the legal possession of the bill, and the obligation contained in it, is called the holder or the payee. Bills of acceptance as one of the most in the recent and reversal energy as one of the most in the legal possession of the bill, and the obligation contained in it, is called the holder or the payer. exchange, as one of the most prompt and powerful engines in conducting trade, are peculiarly privileged by the law, requiring few words, and no solemnities of execution. There is no particular form for a bill of exchange required by law, farther than that the mandate to pay in money be distinct, and the person who is to pay, the person who is to receive, and the time of payment shall be ascertainable beyond a doubt. A mere request to pay money is not a bill, for the drawee is presumed to be the drawer's debtor, and the bill must be an absolute assignment of the debt; nor is an acknowledgment of debt, or a promise to pay which is part of a bargain for the sale of goods. Where a bill has all the apparent requisites, though an expression which takes it out of this species of document be fraudulently introduced to escape observation, it would appear that it will still be held a bill against the committer of the fraud. This was held where the word "at" was introduced in very small letters within the tail of the S of Sir in the address to the drawes very small letters within the tail of the S of Sir in the address to the drawee (Allan v. Mawson, 4 Camp. 115). An order to pay in any thing other than cash is not a bill, as "in East India bonds," "in bank-notes," &c. The amount must be specific, and therefore the addition of the words "or whatever else may be due," would vitiate a bill. The money must be payable "at all events," and any condition which may affect the certainty of the declared intentions of the parties to hold it an absolute order to pay at some time or other, will vitiate the bill, as, where A B agrees to pay when C D shall marry, or at a certain time if C D be alive then, or if C D shall have disposed of certain property. From the time when a bill is drawn and delivered, it becomes by the operation of the contract of mandate, a document of debt in favour of the payee, for he who in fulfilment of an obligation gives an order on another to pay, becomes himself responsible on that other not performing. If the drawee is not indebted to the drawer, or as it is commonly termed, has "no effects," he will not be liable, even though he has accepted, to the drawer, but third parties who have received the paper for value, are not affected by the obligations between the original parties, otherwise than as they appear on the bill. [Accommonation Bill.]

A drawer generally appends his usual signature at the foot of the mandate. The

A drawer generally appends his usual signature at the foot of the mandate. The acceptor to whom it is addressed generally signs below the drawer, either with or without the word "accepts" before his name. An indorser commonly puts his name on the back, with or without a direction to pay to a particular person. [Drawer. Acceptor. Indorser.] It is a common practice to mention on the face of a bill that it is " for value received;" but this is not necessary, and in the general a bin that it is not value received; but this is not necessary, and it the general case value is presumed, and need not be proved by the party pleading it unless where a bill has been originally obtained through fraud, or in the case of a transfer by delivery by a person not entitled to make delivery, or in that of a bill which has been stolen. In Scotland the presumption of value is so strong that no evidence will be received to contradict it but the writ or eath of the party pleading it. Persons may come under general obligations as to bills which have to be made specific by the acts of others. Thus if one makes a bill blank in the name of the payee, any bond fide holder is entitled to fill in his own name. A person who delivers a blank bill stamp, drawn or accepted, is liable for whatever sum, covered by the stamp, may be filled in. Bills may be subscribed by procuration. Whoever takes such a bill, however, must assure himself of the procurator or agent's authority to grant it, for if he exceed his powers, the bill will not be effectual against his employer. A person who signs "per procuration" should mention that he does so, otherwise he will be personally liable.

Bills of exchange are divided into foreign and inland; the former are drawn in one country and payable in another, the latter are drawn and payable in the same country. A bill drawn in one of the three British kingdoms on a person resident in another, is, for some purposes, considered a foreign bill. The peculiar privileges which attach to bills as negotiable instruments, were first awarded to foreign bills, or to those drawn in Britain and payable abroad, and arose out of the absurd notions regarding the balance of trade. By 9 & 10 Wm. III. c. 17, and 3 & 4 Anne, c. 9, in England, and by the act 1696, c. 36, in Scotland, inland bills were placed in the same situation with foreign; and in most essential points, the laws as to be received to contradict it but the writ or oath of the party pleading it. Persons

both are analogous to each other. The chief distinction is in the practice of protest in England, which is necessary on occasion of the dishonour of a foreign bills, but is limited in effect and practice in inland bills. [Provers.] Foreign bills are generally drawn in several sets or parts, transmitted by different conveyances, in order that if any one or more should be lost, another may arrive safe for being presented. Each bears that it is payable on the others not being paid, as, "pay this my second bill of exchange, first and third of the same tenor and date not being paid," &c. The drawee of a bill drawn in sets should only accept one of the sets, as it is held that if he accept one set, and afterwards pay another set, he will not be liberated from the claim of a bond fide holder of the accepted ones.

By special statute in England, all bills under 20s. are void, and those between that sum and £5 must be made payable within twenty-one days after date, contain the name and description of the payee, and hear date at the time of making. They must likewise be attested by a subscribing witness (15 Geo. III. c. 51, 17 Geo. III. c. 30, and 27 Geo. III. c. 16). [Indoerrement.] Persons negotiating in England bills or notes under £5, or on which less than £5 remains undischarged, made in Scotland or Ireland, or elsewhere out of England, forfeit a sum not less than £5, or more than £20 (9 Geo. IV. c. 65, § 1). Bills of exchange must be on a proper stamp. In Britain there is a distinction in the scale of duties for those drawn not exceeding two months after date, or sixty days after sight, which are said to be at short date, and Britain there is a distinction in the scale of quite nor show they have allowed in the scale of the Irish stamp act, 56 Geo. III. a. 184, Sched.).

There is no such distinction in the schedule of the Irish stamp act, 56 Geo. III. There is no such distinction in the schedule of the Irish stamp act, 56 Geo. III. c. 56. There are separate tables for bills drawn in sets, each set requiring to be stamped. The principal exemptions are, bills issued by the Bank of England; bills drawn in pursuance of the acts for paying and supplying the army and navy (55 Geo. III. c. 184, Schedule). By 9 Geo. IV. c. 49, § 15, drafts on bankers within fifteen miles of the place of drawing are exempt, provided the place where the draft is issued be specified, and they bear date on or before the day of issue, and do not direct payment to be made by bills or promissory notes. Although, as above stated, a document which is not an order to pay money "at all events," is not emitted to the privileges of a bill, yet an order on any particular fund which above stated, a document which is not an order to pay money —at all events,—is not entitled to the privileges of a bill, yet an order on any particular fund which may or may not be available, or depending on a contingency which may never happen, if made payable to bearer, or to order, or delivered to a payee, requires a stamp (Sched.). Persons connected with the issue of bills not duly stamped, forfeit stamp (Sched.). Persons connected with the issue of bills not duly stamped, forfeit £50; and persons post-dating bills, for the purpose of bringing them under the smaller duty applicable to bills at short date, or being in any way accessary to the issue of such post-dated bills, forfeit £100 (55 Geo. III. c. 184, § 11 & 12). Persons evading the stamp-duties under colour of the exemptions in favour of bank notes, and bills, and drafts, forfeit £100 (§ 13). A bill not duly stamped is not admissible as evidence of any description of obligation, and cannot be regarded by a court of justice (31 Geo. III. c. 25, § 19, and 55 Geo. III. c. 184, § 8). It is no objection to the stamp on a bill, that it is of greater denomination than that required by law, or that it is a stamp adapted to a different purpose (if of the assigned or greater denomination), provided it have not the different purpose stated on its face (55 Geo. III. c. 184, § 10). A bill cannot properly be stamped after it is issued; but if the commissioners have stamped it, the period of applying the stamp cannot be objected to against the holder of the bill. But where a bill is stamped, of the proper or higher value, with a wrong denomination on the face of it, it may be reproper or higher value, with a wrong denomination on the face of it, it may be restamped.

Bills, though they are of the nature of a "chose in action," which is not strictly ssignable, may be transferred from hand to hand or negotiated. [Снове ін Астіон.] assignable, may be transferred from hand to hand or negotiated. [CROSE IN ACTION.]
In England, to enable this to be accomplished, there must be negotiable words, such as "or order," "or bearer;" in Scotland this is not requisite. A bill payable to A B, or order, is indorsable by A B, and payable to his indorsee. A bill payable to A B, or bearer, is payable to whoseever holds it, A B's name not affecting the nature of the document. The various parties upon a bill, besides the acceptor, indorsers, drawers, and others, become liable for its payment on failure of the acceptor. The acceptor of filling to pay is commonly raid to be an ext of disof the acceptor. The acceptor's failure to pay is commonly said to be an act of dishonour. If the drawer refuse acceptance, this likewise is dishonour, and is held to be such a prospective refusal of payment as entitles the holder to claim immediately from the drawer, or, if there be an indorser, on that indorser, who has recourse on the drawer; but to entitle him thus to recur on the original parties, there are obligations on the holder, without performing which he is held not to have duly negotiated. He must present the bill for acceptance and for payment on the proper occasions. [Presentment.] He must give notice of non-acceptance, or of non-payment; and in particular cases he must have the bill pretested in such circumstances. [Notice. Protest.] In Scotland due negotiation gives a bill which has no irregularity on its face a peculiar privilege, by which it is held as the decree of a court, and put in immediate execution, unless cause can be shown for suspending. [Diligence, Summary.] Bills of exchange cease in England to be documents of debt on the expiry of six years from the time named for payment. By 9 Geo. IV. c. 14, § 3, no memorandum of part payment by the party receiving payment is sufficient to take a bill out of the rule. In Scotland, by 12 Geo. III. c. 72, § 37, and 23 Geo. III. c. 18, § 55, no action can be commenced on bills after six years from the time of payment. This provision does not affect the debt or obligation on which the bill proceeds, which is still open to be proved otherwise. (Bayley on Bills. Chitty on Bills. Thomson on Bills.)

FORM OF ORDINARY INLAND BILL

FORM OF CADIMARY INLAND BILL

London, January 1, 1861.

Three months after date, pay to me or order, One Hundred Pounds, for value received.

John Smith.

To Mr William Anderson, Merchant, Glasgow.

William Anderson.

To Mr William Anderson, Merchant, Glasgow.

William Anderson.

FORM OF A PROMISSORY NOTE.

100. London, January 1, 1861.
Three months after date, I promise to pay to Mr John Smith, or order, One Hundred Pounds,
r value received. for value received. William Anderson.

The variations above noticed, in regard to a bill, are all applicable, so far as they are consistent with the nature of the document.

FORM OF A FOREIGN BILL.

£340. FORM OF A FORMOW BILL. Havana, April 1, 1861.

Skryt days after sight of this Frast of Exchange (Second and Third unpaid), pay to the order of Messrs Lamb and Thompson, Five Hundred and Forty Pounds sterling, value received; and charge to account, with or without advice of Thomas Forbos.

To John Walker, Esq., Liverpool. John Walker, payable at the office of Messrs Barclay and Company, Loudon.

Payable in London.

The naming of the payee admits of the same variations as are exhibited in an inland bill. The time of payment may also be expressed in the various ways applicable to an inland bill. The term "usance" is sometimes employed to express the period of running in foreign bills. It means esertian time fixed by custom as between any two places, and the period covered by a usance will therefore depend on the places of drawing and payment. "An usance between this kingdom and Amsterdam Rotterdam, Hamburg, Altons, or Paris, or any place in France is one calendar month from the date of the bill; an usance between us and Cadix, Madrid, or Bilbao, two; an usance between us and Leghorn, Genoa, or Venice, three." (Bayley on Bills, 251.) B

BILL OF HEALTH. [Quarantine.]

BILL OF LADING is the acknowledgment given by the master of a ship for goods shipped. It is a negotiable instrument. Several parts or copies are made out, one for the use of the master, the others for the shipper, who, by means of them, can give a title to the consignee or other person for whom the goods are destined, to receive them. The following is an ordinary form of a bill odding:

Shipped in good cortes and well-conditioned by John Smith & Co., in and unon



Shipped in good order and well-conditioned by John Smith & Co., in and upon the good ship called the Elizabeth, whereof is master for this present voyage William Nelson, and now riding in the river Douro, and bound for Leith, then hogsheads red Port Wine, being marked and numbered as in the margin, and are to be delivered in the like good order and well-conditioned at the aforesaid port of Leith, the dangers of the seas only excepted, unto Mr Henry Ivison, or to his assigns, he or they paying freight for the said goods, sixty shillings sterling per ton, with primage and average accustomed. In witness whereof, the master of the said ship hath affirmed to three bills of lading, all of this tenor and date, one of which bills being accomplished, the

Oporto, April 6, 1861

Oporte, April 6, 1861'
When the goods are put on board, a receipt is generally given by the master; this is afterwards exchanged by the holder for the bill of lading. It must be written on a stamp. It will be observed that there is a clause, as in bills of exchange drawn in sets, providing that one set being honoured, the others are void. The bill has two objects. It fixes the amount and condition of the goods received, and for which the shipmaster is responsible [Appreciation of the goods received, and for which the lading that the shipmaster is responsible [Appreciation of the goods received, and the sation and delivery. It may, like a bill of exchange, be negotiated by simple indorsation and delivery, which will carry a right to the goods. No intimation to the shipmaster is necessary, he being bound to deliver to the holder. Notwithstanding the delivery of the negotiable instrument, the goods are still liable to be stopped in transitu, as in the hands of a middleman before they reach the consignee.

[Stopping in transitu.] If the bill has been indorsed for value by the consignee, or his authorized agent, the property is passed, and the right to stop ceases. The right to stop is not barred by delivery of the bill unindorsed to a third party, nor by indorsation without value, or with knowledge on the part of the indorsee that the goods will not be paid for by the indorser, and that the transaction is fraudulent, nor where the indorsee has received notice of the consignee's insolvency. The indorsee however is not held bound to inquire into the ability of the indorser to pay for the goods, and to secure him it is not necessary that he should take the bill without notice that the goods have not been paid for; it is sufficient if he have not received "notice of such circumstances as rendered the bill of lading not fairly and honourably assignable" (Cumming v. Brown, 9 East, 516. See Salomons v. Nissen, 2 T. R. 674). Partial value will give an onerous right to a corresponding extent, and to that extent bar stoppage. Where the indorsee undertook to make advances which he failed to make, it was held that a claim on previous advances was no bar to the right to stop (Newsom v. Thornton, 6 East, 17); but "where the consignee, before his insolvency, and before the goods had arrived, has indorsed the bill of lading to a third party as a security for advances, the equitable right of the unpaid vendor to stop the goods (although he has no strictly legal right to resume possession even after the claim is satisfied) continues, subject only to the amount of such claim; and, if the indorsee holds in his hands any other property belonging to the insolvent, the unpaid vendor has an equity to compel him to resort to it in the first place." (Morton on Vendors and Purchasers, 196, 197. Holt on Shipping, 359-378. Smith's Mercantile L. 243-246. Bell's Com. i. 198, 219.)

BILL OF STGHT, a form of entry at the custom-house, by which goods, respecting which the importer is not possessed of full information, may be provisionally landed

BILL OF STORE, a form of writing by which certain kinds of goods may be entered at the custom-house for reimportation; also a custom-house license permitting the provisions and stores necessary for a ship's voyage to be shipped duty free and without entry: this last is sometimes termed a Victualling Bill. [Customs.]
BILLINGSGATE. [Markets.]

BILLON, in coinage, a base alloy of gold or silver (generally the latter) in which copper is predominant. The word is derived from the French, but its origin is doubtful. In Spain billon money is called moneda de vellon.

doubtful. In Spain billon money is called moneda de vellon.

BIRCH (Betula alba), a graceful forest tree, common in the cold parts of Europe. It is valuable for poor elevated soils, and on wet or springy land; but is seldom planted on favoured soils, as its timber is not durable, and in little esteem. It is chiefly used for underwood, and by the turner and wheelwright. In Scotland it is much employed for underseed palings; and sometimes cut into staves for herring barrels. It affords good charcoal. The bark yields a yellow dye for wool, and also the oil used in making Russia leather. The black birch of America (B. lenta), imported into this country, is a compact handsome wood; but it soon decays. It is used for forming the slides of dining-tables, and similar purposes.

BIRD-LIME, an adhesive, tenacious, vegetable product, obtained principally from the inner bark of the holly by bruising, long boiling in water, and fermentation; the mass being again boiled in water and evaporated to a proper consistence. This kind is of a greenish colour, odour resembling that of linesed oil, and having a bitter taste. Bird lime is also procured from the berries of the mistletoe, and other plants. In commerce it generally occurs in an impure state.

BIRD NESTS (EDIBLE), in oriental commerce, a celebrated luxury of the

other plants. In commerce it generally occurs in an impure state.

BIRD NESTS (EDIBLE), in oriental commerce, a celebrated luxury of the table, highly esteemed by the Chinese. They are the nests of a species of swallow (Hirundo esculenta) common in the Eastern or Malayan Islands, from whence immense quantities are exported into China. The nest when pure is of a creamimmense quantities are exported into China. The nest when pure is of a creamwhite colour, semitranslucent, and in shape and size like a quarter of an erange.

It is muco-albuminous, and in soup possesses little or no taste,—at least to the European palate. In the preparation of this dish by the Chinese, however, such a
number of fine stimulants are generally added, that of right it occupies the first
rank amongst relishes at their tables. These nests are said by Meyen (Quarterly
Review, vol. liii. p. 533) to be formed of the sea-weed, Sphorococous cartilaginus var. setaceus aq. The swallow eats the fresh weeds, and permits them to soften for

some time in its stomach, after which it throws up the mass now converted into a jelly, and sticks it together to form the nest. The nests are brought in their raw state to China, where they are cleaned in immense warehouses built for the purpose, and then exposed to sale. They are accounted in that country highly restorative.

restorative.

The quantity of edible birds' nests annually exported from Java to China is estimated at no less than 200 peculs; of which by far the largest proportion is the produce of the Javan rocks and hills. The price which those nests of the best quality have of late years brought in the Canton and Amoy markets has been 40 Spanish dollars per catty. They are usually classed into first, second, and third sorts, differing in price from 40 to 18 Spanish dollars, and even 10 and less for the most ordinary. In the Malayam islands in general but little care is taken of the rocks and eaverns which produce this dainty, and the nests procured are neither so numerous nor so good as they otherwise would be. In Java, where perhaps the birds are fewer, and the nests in general less fine than those to be met with in some of the more eastern islands, both the quantity and the quality have been considerably improved by European management. The caverns which the birds are found to frequent are cleansed by smoking and the burning of sulphur, and the destruction of all the old nests. The birds are then left undisturbed to form their nests, and the gathering takes place as soon as it is calculated that the young are fledged. If they are allowed to remain until the eggs are again laid in them, they lose their pure colour and transparency, and are no longer of what are termed the first sort. Much of their excellence and peculiar properties, however, depend on the situation of the place in which they are formed, and the nature of the different substances to which they are fixed. The best are procured in the deepest caverns (the favourite retreat of the birds), where a nitrous dampness continually prevails, and where, being formed against the sides of the cavern, they imbbe a nitrous taste, without which they are little esteemed by the Chinese. (Ruschenberger's Voyages.)

BIRDS OF PARADISE, a genus of birds (Paradisea) remarkable for the ex-

BIRDS OF PARADISE, a genus of birds (Paradisea) remarkable for the extreme elegance and richness of their feathers. There are various species, but perhaps the most elegant is that which is best known and oftenest seen—the great emerald (P. apodu). The beauty of the male of this species exceeds all description; and even the most magnificent drawings cannot represent the vivid and changing tints of the originals. The feather of these birds is much sought after to decorate the turbans of oriental chiefs, and in this and other countries is employed for the same purposes as the feathers of the ostrich. In dimensions the various species differ considerably. The bodies of most are not larger than that of a thrush, although the thickness of their plumage makes them appear the size of a large pigeon. They are found only in the Papuan islands, from whence they are carried by the natives to the Dutch settlements in the Spice islands; and are imported into Europe almost wholly from Batavia, the number of which it receives annually is stated by Dr Ruschenberger at 1500, valued at 10,000 florins.

The natives of New Guines entrap the birds, or shoot them with blunt arrows; and they prepare the skins with considerable nicety, having removed the true wings, which are not so brilliant as the other feathers, and cut off the legs. The absence of feet in all the birds of paradise brought to Europe gave rise to the fable that they had no power of alighting, and were always on the wing. Their migratory habits may probably also have given some colour to this tale. At the nutmeg season they arrive in flights in the East Indian Lianake, where, according to popular belief, the strength of this spice so intoxicates them that they fall dead drunk to the earth.

"Those golden birds that, in the spice time, drop
About the gardens, drunk with that sweet food
Whose scent hath lur'd them o'er the summer flood."—Moore.

BIRMA, AVA, OR BIRMAN EMPIRE, is situated on the western part of the Eastern Peninsula of India, betwixt 15° and 25° N. lat. It is bounded N. by Assam and the adjacent states; E. by Siam, and the Shan nations; S. by Siam, the sea, and the British district of Martaban; and W. by the sea and the British possessions of Aracan and Bengal. The area is estimated at nearly 200,000 square miles, and population at 4,000,000. The capital is Ava, in 21° 50′ N. 95° 50′ E.; pop. 50,000. The government is a despotic monarchy; but the sovereign, called Boa, has two councils, a public and a private one, through which his edicts are issued. his edicts are issued.

The two great divisions of the empire, Ava and Pagu, are throughout intersected by the river Irrawady, which, rising in the chain of the Himalaya, flows through several mouths into the gulf of Martaban. Ava occupies the upper or northern district of the Irrawady; and Pagu, in the lower or southern district, is a sort of delta entirely traversed by the alluvial branches of this river. Beyond the banks of the Irrawady, little is known respecting the interior. In the northern part of Ava, the country is mountainous and irregular, and the valleys generally narrow, but near Amarapoura, the seunity opens up; and the portion betwirt that city and the mouth of the Kyan Duaya, is the most fertile and populous part of the empire, containing Ava and several other considerable towns. Below Ava the Irrawady is a majestic river, and betwirt 18° N. lat. and the sea, it throws off a great number of branches of various magnitudes, watering an immense direct, and affording an internal navigation scarcely equalled in any country. Gold, silver, copperting, iron, lead, and antimony are found in Birma, chiefly in the mountainous districts on the N. E.; but the metallic riches of the country are much neglected; coal, amber, nitre, salt, and

limestone also exist abundantly in various piaces; the most remarkable mineral product, however, is petroleum, or mineral oil, an enormous quantity of which is produced from wells near Prome, and used throughout the provinces, yielding a large revenue to government.

The principal vegetable productions in a commercial point of view, are catechu and teak; the latter, though generally diffused throughout the country, is mostly obtained from the forest of Barawadi, betwirt the high and low lands. The chief objects of cultivation are rice, maise, millet, wheat, various pulses, palmas, segar-cane, tobecco, cotton, and indigo. Tas is grown near Amarapoura, but its leaf is coarse, and is soldom used but as a pickle. The seasons of Birman have a general resemblance to those of Bengal.

The internal commerce of the empire is considerable, being greatly facilitated by the Irrawady, and its tributaries: the foreign is nearly limited to a caravan trade with the Chinese, and the maritime trade at Rangoon. The intercourse with the Chinese takes piace at annual faire at Bhanmo and Medi, near Ava; and the commodities supplied by them consist chiefly of raw silk, copper, orpinent, quicksilver, vermilion, iron pans, brass wars, tin, lead, alma, silver, gold and gold leaf, earthenware, paints, carpeta, rhubarb, tea, honey, velveta, spirits, musek, verdigris, dry fruits, paper, fans, umbrellas, wearing appared. The principal exports are raw cotton, with coramental feathers, edible birds' nests, ivory, horns, and a small quantity of British woolless. The total amount of this trade, including imports and exports, is from £400,000 to £700,000.

Rangoon stands in 16*47 N. lat., 95° 18° E. long, on the northern bank of a branch of the Irrawady, about 32 miles from the sea; pop. 90,000. The climate, as in Calcutta, is divided into the cold, hot, and rainy seasons. In November, Fahrenhelt varies from 60° to 36°, and in March and April from 72° to 101°. The town is accessible to very large vessels. A bar on the river has only about 5g fat

The duty on exports at Rangoon is 5 per cent.

Measures and Weights.—The tanny or embit as 9 per cent.

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Commerce with the British was regulated by a treaty in 1826 with Birmah up to 1851-2, when differences arose which ended in the British obtaining possession of Pegu.

when differences arose which ended in the British detailing personned to regard the BISCUIT (Dan. Skibstvebak. Du. Scheepsbeschuit. Fr. Biscuit. Ger. Zweibach. It. Biscotto Galetta. Por. Biscoito. Rus. Bort, Scucher. Sp. Biscocho Galleta), a kind of bread chiefly used by scamen, which is baked in the form of flat cakes in order to insure their being deprived of moisture, and so preserved from becoming results during the continuance of long versures.

mouldy during the continuance of long voyages.

BISMUTH (Fr. Bismuth. Ger. Wismuth), a brittle reddish white metal; texture foliated; in hardness is between copper and lead; go. gr. 983; sensible dodor and taste; fusible at 460°. It is scarcely malleable, breaks under the hammer, and cannot be drawn into wire. Bismuth is a very rare metal. It is occasionally found native, but is usually obtained in a combined state in Cornwall, Sionally found native, our is usually obtained in a commerce it is impure, gene behavior, Saxony, and Sweden. As met with in commerce it is impure, gene when the commerce it is impure, generally activities iron and avanie, and probably some other metals. It is used rally containing iron and arsenic, and probably some other metals. It is used for communicating fusibility to other metals, as in forming solders; also in making some kinds of pewter. In the arts it is often called tin glass. A white powder

some kinds of pewter. In the arts it is often called tin glass. A white powder called magistery of bismuth or pearl white is obtained from the nitrate of bismuth, and used in medicine as a tonic. (Brande, Fyfe, &c.)

BIT, a West Indian silver money, worth about 5d.: it is properly the Spanish real of provincial plate (= 2 reals vellon). The term is likewise applied to the small circular piece frequently out out of the centre of the hard dollar.

BITUMEN, or Mineral Pitch, a combustible substance, of which there are several kinds. Elastic Bitumen is of various shades of brown, and has a highly bituminous odour. Hitherto it has only been found in the Odia Mine near Castleton, in Derbyshire. Compact Bitumen is of a brownish black colour; one variety called maltha, may be impressed by the nail; another called ASPHALTUM is very hard and brittle. The softer variety has not been put to any use, but the harder is used for a great many purposes. hard and brittle. The softer variety has not been put to any use, but the harder is used for a great many purposes.

The mineral oils, Naphtha and Petroleum, are also sometimes included under

the head of bitumen. These substances are found in the earth, or issue from its surface; but though commonly stated as minerals, they are all of vegetable origin. (Phillips' Geology and Mineralogy.)

BLACKING, a factitious shoe-black, in general composed chiefly of ivory black

and beer.

BLACKLEAD. [Plumbago.]

BLACK-WOOD, a term generally applied to the timber of different species of Diospyrus which grow in various parts of the East Indies. The best is the black-wood or ebony of the Mauritius. The logs are of various sizes; but those about 6 inches in diameter, long, and straight, are preferred. They are to be chosen free from bark and white wood, without cracks, not worm-esten or decayed. This wood is used for turning, inlaying, and other purposes. The black-wood of Van Diemen's Land is the timber of the Acacia melanoxylon.

BLANKETS a soft loosely-woven woollen stuff. commonly used for bed cover-

BLANKETS, a soft loosely-woven woollen stuff, commonly used for bed cover-BLANKETS, a soft loosely-woven woollen stuff, commonly used for bed covering, form a considerable branch of the British woollen manufacture. The best are made from unmixed British wool. Localities of the manufacture, Dewsbury, Witney, Dalverton, and Glamorganshire, and on a small scale at Hawick in Scotland, and Kilkenny in Ireland. This trade has experienced a great increase of late years. The quantity exported in 1820 amounted to 1,288,409 yards; but in 1839, it had risen to 8,148,846 yards: of which 1,951,743 yards were sent to the United States, 364,351 yards to British America, and 339,968 yards to Ametralia. Australia.

BLEACHING POWDER. [CHLORIDE OF LIME.]
BLENDE, a native sulphuret of zinc. [Zinc.]
BLOCKADE, in the law of nations, takes place when a fort city, or other place BLOCKADE, in the law of nations, takes place when a fort, city, or other place belonging to one of two belligerent powers, is watched by the troops or ships of another, for the purpose of preventing the ingress or egress of people or effects, and especially with the view of starving the garrison into submission. Commercial questions arise principally from blockades to seaward, and they generally come either in the form of cases before the admiralty courts, for the condemnation of neutral vessels which have infringed the blockade, or in insurance questions where a breach of warranty of neutrality is alleged. [Insurance.] The operations of France and England during the late war brought forward several very serious questions about the effect of declarations of blockade. Between the Berlin decrees on the one hand, and the Orders in Council on the other, two powers declared Europe and America to be in a state of blockade as respects the one or the other, and had the principles been carried to their full extent against all breaches of these proclamations, the seas would have been converted into one general arens of piracy and rapine. It has been held, however, that to be acknowledged in a law court, a blockade must be an actual and effectual one. "In the very notion of a complete blockade," says Lord Stowell, "it is included, that the besieging force can apply its power to every point in the blockaded state. If it besieging force can apply its power to every point in the blockaded state. If it cannot, it is no blockade of that quarter where its power cannot be brought to bear: and where such a partial blockade is undertaken, it must be presumed that this is no more than what was foreseen by the blockading state, which nevertheless thought proper to impose it to the extent to which it was practicable" (4 Robinson's Reports, 66, 67). The circumstance, however, that from the state of the wind, or the warlike operations of the besieged, a neutral ship has been able to pass the blockade, will not affect its legality; indeed were it not that there are always chances in favour of evasion, there would be few discussions as to the extent of blockades. On the part of this country, a blockade is proclaimed by an Order in Council. It is believed, that in distant regions, a commander of a ship of war has power to extend such a blockade, but certainly not within the limits of Europe. Neutral merchants cannot be bound to observe one of which their governments have not received official notice. (Chitty's Law of Nations, 128-147. Marshall on

have not received official notice. (Chitty's Law of Nations, 128-147. Marshall on Insurance, 74, 75.)
BLONDE, a species of Lace. There are both black and white blondes, which again are either real or in imitation. The best of the former are imported from France, being extensively manufactured at Alençon in Normandy.
BLOOD-STONE is a species of calcedony coloured by chlorite, with numerous bright red spots like drops of blood; it is called also heliotrope and oriental jasper. It is found in India, Siberia, Iceland, Isle of Rum, though the best comes from India. It is in request by the Chinese as an ornament to their girdle-classe.
BLUBBER is the fat substance (Adeps) found immediately under the skin, and over the muscular layers of whales and other large sea animals, and of which train-

oil is made. In the whale, it invests the body about six inches thick; but near the under lip it is found two or three feet thick.

BOARD, in carpentry, means timber sawed to a less thickness than nine inches; all above that thickness are called *planks*.

BOARD (Fr. Buressu), a term used to designate, in their collective capacity, certain persons to whom is intrusted the management of some department, office, or joint-stock association. Thus the lords of the treasury, the commissioners of or joint-stock association. Intis the fords of the treasury, the commissioners of customs, and the persons chosen from among the proprietors to manage the operations of a bank, are, when met together for the transaction of the business of their respective offices, styled the Board of Treasury, the Board of Customs, the Board of Directors. See BOARD OF TRADE. 2

BOAT, a small uncovered vessel, commonly moved by rowing.

BOAT, a small uncovered vessel, commonly moved by rowing.

The owner of every vessel shall paint, or cause to be painted, upon the outside of the stern of every boat belonging to such vessel, the name of the vessel, and the port or place to which she belongs, and the master's name withinside the transum, in white or yellow rowas letters, not less than two inches in length, on a black grownd, on pain of the forfeiture of such boat on to a onarked, wherever the same shall be found. And the owner of every boat not belonging to any vessel, shall paint, or cause to be painted upon the stern of such boat, in white or yellow roman letters of two inches in length, on a black ground, the name of the owner or owners of the boat, and the port or place to which she belongs, on pain of forfeiture (3 & 4 Wm. IV. c. 53, §§ 8, 10, 11, 12).

Every pilot-boat or vessel, or other boat or vessel in the service of any corporation or society established by law in relation to pilotage, or of, or belonging to, any person authorized to externed entirely black, except the name or other description now required by law to be painted on such boat or vessel (3 & 4 Vict. c. 69, § 2).

BOBRIN. a kind of small cord made of lines or cotton. The common bobbins.

BOBBIN, a kind of small cord made of linen or cotton. The common bobbins, made of linen, are for progressive sizes known by the dealer as Nos. 5, 7, 9, 11, 13, 15. Scotch bobbins are made of cotton, of the same numbers, and designed to imitate the preceding. They are purchased by the dozen, and are usually conimitate the preceding. They are purchased by the dozen, and are usually contained in papers each of two dozens (*Perkins on Haberdashery*).

BOBBIN-NET, a kind of net-work made by machinery, and generally bearing

the characteristics of LACE.

BOISSEAU, a French corn-measure, equivalent to nearly one-third of an imperial bushel.

BOLE, an earthy mineral, formerly an article of the Materia Medica, but now

BOLE, an earthy mineral, formerly an article of the *Materia Medica*, but now disused in Europe, except occasionally as a veterinary medicine. It is dull, of various colours, and has a greasy feel. Localities, Armenia, Saxony, Tuscany, Ireland, Skys. Armenian bole is still used in the East.

BOLIVIA, or UPPER PERU, a state of S. America, situated between lat. 9° 30′ and 25° 40′ S., and long. 58° and 71° W.; boundaries, N. and N. W. the States of North and South Peru, E. Brazil and Paraguay, S. La Plata States and Chili and W. the Pacific Ocean. Area, 318 000 source miles. Pon about the States of North and South Peru, E. Drazil and Paraguay, S. Les Plates Seasons and Chili, and W. the Pacific Ocean. Area, 318,000 square miles. Pop. about 1,000,000, more than three-fourths being Indians and mixed races. It is divided into six departments, Chuquisaca, La Paz, Oruro, Potosi, Cochabamba, and Santa Cruz, which again are subdivided into provinces. Capital, Chuquisaca or La Plata, an inhad site you 18,000. The government is republican the executive power being

into six departments, Chuquisaca, La Paz, Oruro, Potosi, Cochabamba, and Santa Cruz, which again are subdivided into provinces. Capital, Chuquisaca or La Plata, an inland city, pop. 18,000. The government is republican, the executive power being vested in a president for life, with the privilege of naming his successor; and the legislative functions nominally in three bodies, a senate, tribunes, and censors. The country presents very different conditions of surface, elevation, and climate. It is traversed by the Andes, particularly towards the W., while on the E. it stretches out into plains, which are watered by the Beni, Mamore, and other rivers which unite to form the Madeira, the largest affluent of the Amason, and the Pilcomayo, one of the chief branches of the Plata. This region is fertile, but it is nearly covered with vast primeval forests. In the plains, the climate is hot and unhealthy, except in the elevated valley of the Desaguadero, where it is temperate, especially during the winter season, from May to November. Earthquakes are common on the coast.

The mineral productions are gold, principally found on the E. declivity of the E. Cordillera of the Andes, and in the sands of the rivers which fall from that range; allver from the mines of Potosi, which, however, are now much less productive than formerly. In the year 1837, the number of marcs of silver coined at the mint of Potosi was 243,538, value £414,015 stering; in the same year, the number of marcs of gold coined was 1857, value £39,506 (Board of Trade Tables, v. vii. p. 335). Besides the precious metals, copper is procured at Corucuero, and other places; there are also lead, tin, salt, brimstone, and nifre. Of vegetable products, the chief is timber; the cocos of Apollobamba and Mozas is celebrated; the sugar cane and tropical fruits flourish in profusion on the banks of the Beni; and the E. of the Andes abounds in cascarilla, indigo, cotton, rice, coffee, tobacco, canes, cinchona, copalba, sarsaparilla, gum-clastic, vanilla, and other valuab

BOL 91 BOL

place wholly through the ports of the Pacific, which cannot be reached except by tollsome passages. The country to Cobija, the only Bollvian port, is traversed by only one road, that from Ornro, and that is practicable only for mules and llamas. Cobija, though a free port, is therefore but little frequented; the Bolivians preferring to obtain their foreign imports through Arica and Tacnas, ports of Lower Feru, notwithstanding a transit duty of 3 per cent. being there imposed upon them. These imports chiefly consist of hardware and a sew articles of finery. The exports, from the causes aiready assigned, are nearly altogether confined to portable commodities, such as the precious metals, woollens, and hats.

Macarers and Weights same as in Brarn.

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Macarers and Weights same as in Brarn.

**If Bolivian national or hard dollar, when of full weight, is worth nearly 4a. 3d., being minted at the rate of 8 from the Castilian maro (= 3550) troy grains), of silver, 66-72ds. fine, 5900,000, this regulation is not always adhered minted at the rate of 8 from the Castilian maro (= 3550) troy grains), of silver, 66-72ds. fine, 5900,000, this regulation is not always adhered minted at the rate of 8 from the Castilian maro (= 3550) two grains, of silver, 66-72ds. fine, 5000,000; this regulation is not always adhered minted at the rate of 8 from the Castilian maro (= 3550) two grains, of silver, 66-72ds. fine, 5000,000; this regulation is not always adhered to; thus in 1835 its issue amounted to \$500,000; in 1855 to \$303,1863.

**The Public Recessue was in 1839 \$1,700,719; the expenditure in the same year is said to have silver coins issued from the mint of Potosi, with the exception of dollars, have been of the standard.

**The testitory of Universe and Recession of the standard of the sta

The territory of Upper Peru was detached from the Spanish vicercyalty of Peru in 1778, and annexed to that of Buenos Ayres. It was delivered from the Spanish yoke by the victory of Ayacucho in 1834; and, in 1825, a congress assembled from the different provinces, declared it an independent republic, under the name of Bolivia, in honour of General Bolivar, by whom the country was liberated, and its constitution framed. [Prau.] S

BOLL, a measure for corn in Scotland prior to the introduction of the Imperial system. It was divided into 4 firlots, 16 pecks, or 64 lippies or forpits; and 16 bolls made I chalder. In each country, however, the barley-boll (used also for cats and malt) differed commonly from the wheat-boll (used also for pease, beans, rye, and salt). The Linlithgow or Scottish standard barley-boll = 0.728140 imperial quarter, and the Linlithgow wheat-boll = 0.499128 imperial quarter.

To convert Linlithgow wheat-bolls into imperial quarters, multiply the former by the fraction

quarter, and the Linlithgow wheat-boll = 0'499123 imperial quarter.

To convert Linlithgow wheat-bolls into imperial quarters, multiply the former by the fraction 0'499138; or, approximately, substitute for the wheat-boll, firlot, peck, and lippy, the imperial all-quarter, bushel, peck, and half-galion respectively; or, more nearly, multiply the number of bolls by 3000, and divide the product by 4007.

To convert prices per Linlithgow wheat-boll into prices per imperial quarter, multiply the former by 2'003494; or, approximately, take the double of the prices per wheat-boll; or, more nearly, add to the price per wheat-boll a halfpenny for every pound, and then double the result. To convert Linlithgow barley-bolls into imperial quarters, multiply the former by 1'373353; or, approximately, add 4id, per shilling to the price per barley-boll; or, more nearly, add to the price per barley-boll is fourth part, together with the half of the fourth part. On the other hand, to convert imperial quarters into Linlithgow wheat-bolls, multiply the former by 4007, and divide the product by 3000; and to reduce the price per imperial quarter into Linlithgow barley-bolls, multiply the former by 4007, and divide the product by 3000; and to reduce the price per imperial quarter into Linlithgow barley-bolls, multiply the former by 3'37353; or, approximately, multiply the imperial quarter by 11, and divide the product by 8; and to reduce the price per imperial quarter to the price per barley-boll, multiply the former by 1'37353; or, approximately, multiply the imperial quarter by 11, and divide the product by 8; and to reduce the price per imperial quarter to the price per barley-boll, multiply the former by 1'37353; or, approximately, multiply the imperial quarter to the price per imperial quarter a farthing for every pound; from the result take \(\frac{1}{2} \) the price per imperial quarter to the price per barley-boll, multiply the former by 1'37353; or, and then from the remainder take \(\frac{1}{2} \) the price per imperial

Table showing the number of Bushels, Pecks, and Gallons, Imperial Measure, equivalent to one Boll of the Old Scottish local Measures.

	Bar. Outs, &c.	Wheat, &c.		Har, Oats, &c.	Wheat, &c.
Argyll, Inverary. — Achnabreck. — Cantire. Ayr. Banff. Berwick. Bute. Caithness Clackmannan Dumbarton. Elgin and Moray. Fife. Forfar, Dundee. — other places.	6 1 1-544 6 1 0-411 6 2 0-436 7 3 1-014 7 3 0-045 6 1 0-256 5 3 0-687 7 3 0-789 6 0 1-418 6 1 1-019 6 0 1-418 6 3 0-957 5 3 1-353 6 0 0-104	3 3 1-029 4 1 0-551 3 3 1-111 3 3 1-379 3 3 1-943 4 0 1-691 4 0 0-188 4 0 0-390 4 0 1-072 4 0 0-484	Kincardine, South part Kinros Kirkendbright — bet. Orr and Fleet. — West of Fleet. — Rast of Orr. Liellingon. Nairn { Barley Onts. Renfrew. Ross and Cromarty. Roxburgh. — Teviotdale — Stikrik. Stirling. Sutherland	5 3 0 565 10 2 1 311 11 2 1 067 9 2 1 556 5 3 0 601 6 0 1 097 7 2 1 371 6 1 0 445 5 3 0 0 442 7 2 0 552 7 1 1 274 6 0 1 1 1274	3 3 1-944 3 3 1-944 3 3 1-944 3 3 1-944 3 3 1-945 5 0 1-506 4 3 0-765 3 3 1-919

92 BON BOM

The standard Scottish meal-boll contained S Dutch or Lanark stones, equal 137135 Rs. avoir-dupois, but usually reckoned 140 lbs., in consequence of the Lanark stone being estimated at 175 lbs. avoir-dupois.

In the flour measure at present in use a boll is reckoned equal to 140 lbs. avoir-dupois: this boll is divided into 10 stones or pecks, and 2 flour bolls equal 1 mck. [Bushes. Measures and

WEIGHTS.]

BOMBAY. [East Indies.]
BOMBAZINE, a twilled fabric, having its warp of silk, and its shoot or weft of worsted. The worsted is thrown on the right side which has a twill upon it. It was formerly made entirely for mourning garments, but it is now manufactured of various colours. Bombazines are all woven with silk of the natural colour and was formerly made entirely for mourning garments, but it is now manufactured of various colours. Bombazines are all woven with silk of the natural colour and dyed afterwards. The pieces are generally sixty yards long; the width is intended for § yard, but seldom measures more than half a yard, oftener under than over. They are almost wholly made at Norwich, where the manufacture was introduced by Flemish artisans, who fled from the persecutions of the Duke of Alva. [Silk MANUFACTURE.]

BOND. A description of obligation which assumes a variety of forms, and is connected with many of the contracts separately considered in this work. A simple bond is an obligation to pay money, generally with interest, at a certain time or under certain signatures.

connected with many of the contracts separately considered in this work. A simple bond is an obligation to pay money, generally with interest, at a certain time, or under certain circumstances.

In England, "a bond, or obligation," is defined as "a deed whereby the obligor [or person bound] obliges himself, his heirs, executors, and administrators, to pay a certain sum of money to another [the obligee] at a day appointed" (Blacktone's Com. ii. 339). A bond must be under seal, and thus constitutes a higher obligation than a simple contract. An obligation by bond extinguishes a simple contract debt, but the bond of a surety will not extinguish the debt of the principal (White v. Cyler, 6 T. R. 176). A bond being a chose in action [Chose in Acrons], cannot be assigned so as to enable the assignee to pursue on it in his own name; but by modern practice the assignees uses in name of the obligee, a power to that effect being inserted in the assignment. It is usual to grant bond to pay a certain sum, provided a certain act is not performed; or, more properly speaking, to grant an obligation which shall be void if a particular act be performed. It is thus not illegal by the usury laws to take a bond for a larger sum than the principal and legal interest of a debt, if the debt be not paid by a day certain. "Where a penalty is inserted merely to secure the enjoyment of a collateral object, the enjoyment of the object is considered in equity as the principal intent of the deed, and the penalty is only accessional, and only operates to secure the damage really incurred, until the actual damage sustained shall be ascertained by an issue (Bacon's Ab., Obligations, A.). By 4& 5 Anne, e. 16, §12," where an action of debt is brought upon any bond which hath a condition or defeasance to make void the same upon payment of a less sum at a day or place certain; if the obligor, his heirs, executors, or administrators, have, before the action brought, paid to the oblige, his executors, or administrators, have, before the action broug course may sometimes, however, be had by insisting on specific performance of the original agreement, the performance of which is to relieve the obligor from the penalty in the bond. A bond requires no particular form, provided it distinctly set forth an obligation to pay money, and be sealed and delivered. By 13 & 14 Vict. c. 97, "a bond in England, and a personal bond in Scotland, given as a security for any definite and certain sum of money," is liable to an ad valorem stamp, commencing with 1s 3d, where the sum does not exceed £50. The same scale of duties applies where the bond is "given as a security for the repayment of any sum or sums of money to be thereafter lent, advanced, or paid, or which may become due upon any account, together with any sum already advanced or due, or without, as the case may be." For every £100 above £300, 2s 6d. One advantage of a bond is, it binds not only the obligor but his heirs in specialty, so that the holder's claim it binds not only the obligor but his heirs in specialty, so that the holder's claim

has precedence of those who are creditors by simple contract, over the assets, real and personal, of the deceased. By 3 & 4 Wm. IV. c. 104, however, which first made real property assets for simple contract debts, the debtor must have expressly bound himself "and his heirs," to give a preference over the real estate. A court of equity will order voluntary bonds, or other special contracts, without consideration, to be postponed to genuine debts, though merely "simple contract debts (3 P. Wms. 222). By the statute of limitations, simple contract debts are harred by the expiry of six years from the time of their origin. By 3 & 4 Wm. IV. c. 42, § 3, action may be brought on a bond at any time within twenty years from its falling due. Bonds, though granted simply for payment of money, if made in furtherance of any illegal or immoral contract, may be barred by pleading the nature of the transaction (Blackstone's Com. ii. 339-341. Bacon's Abridgment, Oblications).

IN SCOTLAND, the bond is of two kinds, moveable and heritable. The former resembles the English bond, and is employed for an equally great variety of purposes,—among others, for that of accomplishing cash-credits with banks [Cash-Cardit]. Sureties or cautionries, out of the course of mercantile transactions, and requiring much formality, are generally accomplished by bonds of cautionry. In Scotland it is not the practice to seal deeds. A bond is executed for all practical purposes, and proves itself until reduced or disproved, if signed in presence of two male witnesses who sign with the obligants and whose pages and design. tical purposes, and proves itself until reduced or disproved, if signed in presence of two male witnesses, who sign with the obligants, and whose names and designations are recorded in the body of the deed, along with that of the writer, and the day and place of executing. It is usual to insert a clause of registration, by which the bond may be summarily enforced without the intervention of a court of law [Resistration, Clause of]; but to admit of this recourse, the obligation must be so precise and certain, that it may at once be enforced without farther inquiry, and so nothing must be left to future ascertainment, though there is an exception in the case of cash-credits, the sum for which execution proceeds in their case being fixed by reference to an account extracted from the bank books. [Cash-Credit.] Heritable bonds are bonds on real property, and bear some resemblance to mortgages in England. The simple heritable bond is now little used as a security for money, but is generally united with the disposition in security, which being a reversionary transfer of the property itself to the lender, affords greater facility for procuring payment from the estate (Burton's Manual, 543-546).

BONDES. The bones of animals have long been used in turnery and other arts. In this country, however, their chief use is as a manure on light soils, particularly

In this country, however, their chief use is as a manure on light soils, particularly for turnipe; and the facility of their carriage has permitted many distant and hilly districts to be improved at a comparatively small cost. Little difference is observed in the kind of bones used; but those boiled or fermented are generally preferred. Their effect as a manure is said to depend on the phosphate of lime contained in them, and in their power of absorbing and retaining moisture. Before being used they are crushed into different sizes called drill bones, medium, and dust; for which purpose, mills have been erected in many parts of the country. Bone manure was first introduced in 1800, but it was not extensively used until within the last terms. within the last ten years. The increasing demand for this material has led to its within the last ten years. The increasing demand for this material has led to its importation from foreign, and even distant countries; of late, considerable difficulty has been experienced in meeting the demand. The price in 1840 was, bone dust medium 22s. to 23s., and drill about 21s. per imperial quarter. These high prices have led to a system of adulteration which is very generally practised in mixing this manure with saw-dust, slaked lime, and numerous other ingredients. S.

BONUS (Lat.), good, a term commonly used to express an extra dividend or allowance to the shareholders of a joint-stock company, out of its accumulated

BOOK, a name applicable in a general sense to almost every literary composition, but usually confined to such compositions as are large enough to form a volume. Printed volumes are distinguished according to the number of leaves produced from one sheet of paper. Folio is the largest size, of which 2 leaves or 4 pages make a sheet; Quarto or 4to, 4 leaves or 8 pages; Octave or 8to, 8 leaves or 16 pages; Duodeoimo or 12mo, 12 leaves or 24 pages; Octave or 16mo, 18 leaves or 36 pages, and so on. These again differ according to the size and form of the sheet. Thus there are royal, demy, post, and crown octaves; and the same with the others.

The modern book-trade dates from the discovery of the art of printing with moveable types by John Gutenberg of Mayence, in 1441. In 1471, the art was

brought to London by William Caxton, a mercer, and from that time until 1600, the activity of the press was considerable; the works chiefly issued being Bibles and works on divinity, translations of the classics, versions of French and Italian romances, and old chronicles. Few, however, but "clerks and noble gentlemen" could then use these works, as their expense and the imperfect state of education placed them beyond the reach of the people in general. In 1505, 20 pence, a sum then equal to a labourer's weekly wages, were paid for a "Primer" and a "Psalter:" and in 1516, "Fitzherbert's Abridgment," a folio law-book, was sold for 40 shillings, a sum which at that time would have bought 3 ozen. The edition of a book, during this period, averaged about 200 copies. The stormy period from 1600 to the revolution in 1688, was, although the age of Shakspeare, Bacon, and Milton, upon the whole less favourable to the diffusion of knowledge; and the number of books issued, unconnected with religious or political controversy, was very small. Only two editions, or about 1000 copies, of Shakspeare, were printed betwixt 1623 and 1664. From 1666 to 1680, the works printed were, 947 divinity, 420 law, 153 physic, 397 schoolbooks, and 253 geography, including maps, or in all, only 3550, of which, about one-half were single sermons and tracts, and a considerable proportion reprints. The period from 1688 to the accession of George III. in 1760, was much more celebrated. Newspapers were established on a regular footing, both in London and the provinces: in 1/31, appeared the "Gentleman's Magazine," the first of that class of periodicals produced in England, and in 1749, the first review, "The Monthly;" and other similar works soon followed. Publishers attained higher influence in society, and the trade of books went much inches the first of that class of periodicals produced in England, and in 1749, the first review, "The Monthly;" and other similar works soon followed. the first review, "The Monthly;" and other similar works soon followed. Publishers attained higher influence in society, and the trade of books went much more than formerly into regular commercial channels. The number of new ones the first review, "The Monthly;" and other similar works soon followed. Publishers attained higher influence in society, and the trade of books went much more than formerly into regular commercial channels. The number of new ones printed during this period was, however, not large, as the publishers appear to have aimed less at novelty than at selling large impressions of a few standard works. Betwixt 1700 and 1756, excluding pamphlets and tracts, only 5280 new books appeared; or, on an average, 93 annually. The period from 1760 to 1800 is distinguished less for originality than for the increased diffusion of literature. Periodical works were multiplied, and the principle of "number books" was then first developed. Of the latter, one of the most successful was Smollett's History of England, which sold to the extent of 20,000 copies. Towards the end of the century, the average number of new books published annually was about 570, exclusive of pamphlets. From 1800 to 1827, the average annual number of new books, exclusive of pamphlets, was about 588; showing a very considerable increase relatively to the preceding period. Notwithstanding this increase, little had been done for many years in economizing the mode of conveying knowledge; indeed, as compared with the preceding centuries, the price of books had advanced, and the reading portion of the middle classes had little or no opportunity of gratifying their taste, except through the medium of circulating libraries, and reading clubs. A larger class of readers, however, had now arison, for whom a new species of literature was to be provided. With the view of meeting the wants of this class, "Constable's Miscellany" appeared in 1827; soon afterwards, the Society for the Diffusion of Useful Knowledge was instituted, for the purpose of conveying sterling information in a cheer province of the great writers. The success which in general attended these operations has gradually revolutionized the book trade. The portly folios and quartos of former times have given plac

Weekly, religious, 6; literary criticism, 2; musical criticism, 1; medical, 4; scientific, 2; advocacy of particular opinions, 2; miscellanies, 18; tales, 5; attempts at fun,—moetly trash, 7; sporting slang, 1; total, 48; of which, 21 were published at ld., 8 at 1½d.; 7 at 2d., and the rest at higher prices, varying up to 8d. Monthly, including weeklies issued in parts, 236; whereof, general literature, 58; science, 48; religious, 46; histories of England, 4; works issuing in volumes, 17; fine arts, 20; fashions, 6; the remainder chiefly children's periodicals. Quarterly, 34. The aggregate circulation of the whole is unknown; but the number of periodicals sold on the last day of each month (1837) was stated at 500,000, and their cost, £25,000; and the number of parcels despatched in the same day by the London booksellers to the country, 2000. The last would be much greater, were it not that the majority of the Scotch and Irish provincial booksellers transmit their London orders through the medium of their agents in Edinburgh and Dublin.

orders through the medium of their agents in Edinburgh and Dublin.

The declared value of printed books exported annually from the United Kingdom is nearly £150,000; of which about one-half is sent to India and the British colonies, one-fifth to the United States, and the remainder chiefly to France, Germany, Holland, and Italy. The amount of duty annually paid on foreign books imposted in about £2000.

imported is about £8000.

The chief seats of the foreign book trade are Paris, and Leipzig in Saxony, where all the German publishers have agents, and where the trade is likewise facilitated by two great book-fairs which are held annually, at Easter and Michaelmas. These fairs are frequented not only by all the booksellers of Germany, but by many of those of the neighbouring countries.

Books first composed, or written, or printed in the United Kingdom, and printed or reprinted in any other country, are prohibited from being imported for sale, except books not reprinted in the United Kingdom within twenty years, or being parts of collections, the greater parts of which had been composed or written should (3 & 4 Wm. IV., c. 80, § 89).

Books first composed, or written, or printed and published in the United Kingdom, and reprinted in any other country or place, may not be entered to be warehoused (Ibid. § 59).

The importation for private use of English books reprinted abroad is limited to a single copy for each party, accompanied by his luggage. (Treasury Order, June 29, 1830.) [Copyright.]

BOOK-DEBT, an expression employed to designate an obligation for the price of goods sold and delivered, when it is supported by no better evidence than the BOOK-DEBT, an expression employed to designate an obligation for the price of goods sold and delivered, when it is supported by no better evidence than the books of the seller. An entry made by a tradesman himself is not evidence in his own favour. If his shopman be examined as a witness, however, he may employ the entry as a memorandum to refresh his memory. Entries by a clerk or shopman are not in all cases evidence, but they may be admitted in certain circumstances. By a rule not easily to be accounted for, after the person who made the entry is dead, and when it is consequently difficult to get any explanation of the circumstances connected with it, it is better evidence than if he were alive, and capable of being examined on the subject. Mr Phillips, on this subject, says, "the entry in the tradesman's book ought to have been made by the shopman; or, if not actually written by him, should at least appear to have been observed by him, soon after it was made, so as to enable him to speak to its correctness, and that the entry may be tantamount to one made by the shopman himself. If the shopman sliving, he ought to be produced as a witness, that he may explain the circumstances and dealings on which the entry was founded. When he is examined, he may use the entry as a memorandum; and the other party charged with the debt will then have an opportunity of examining into its correctness. If the person who made the entry was employed as shopman or clerk, to deliver goods, &c., and he is since dead, an entry made by him will be evidence, under certain restrictions. But proof of the handwriting of the clerk, and that he is gone abroad, and is not likely to return, has been held not to be sufficient to make such an ex parte memorandum admissible in evidence" (Law of Evidences, 7th edit. 264). A merchant's books will, in the general case, be very effectual evidence against himself.

In England, by statute 7 James I., c. 12, it is provided that no tradesman, or handicraftsman, shall be allowed to give his books in evi

handicraftsman, shall be allowed to give his books in evidence of goods delivered or work done by him, after the expiration of a year from the date of the entry, unless he have in the mean time obtained a bill or obligation for the debt, or have unless he have in the mean time obtained a bill or obligation for the debt, or have brought his action within the year. The act does not apply to transactions between merchant and merchant. It proceeds on the preamble, that tradesmen were in the practice of producing accounts against individuals and their representatives, long after the transactions on which they were founded had been forgotten, and it is understood to have been passed in reference to a general belief, that after the expiry of a year, tradesmen's books became evidence, when they were not so before. In Scotland, by statute 1579, c. 83, all book-debts, or accounts, by tradesmen and

others, prescribe in three years. The period runs from the last entry in the ac-

others, prescribe in three years. The period runs from the last entry in the account, so that if there be a new entry at any time within three years after an immediately previous one, the whole account is saved from prescription till three years after that entry. The prescription does not dissolve the obligation to pay—it merely limits the proof to two descriptions of evidence—a writing by the debtor, and an appeal to his oath. If, in the latter, the debtor admit the constitution of the obligation, he will not be relieved unless he specifically swear to its payment. BOOK-KEEPING is the art of recording financial facts in a lucid and systematic manner. The only method of book-keeping founded upon general principles is the Italian, or, as it is more commonly called, the Double-Entry system, from its being based on the principle, that every transaction in business is virtually a transfer between two accounts, and so must be entered to the debit of the one, and the credit of the other. "Of the efficiency of this system, the trading world in its infinite variety of commerce and concerns gives unanimous ordence. Into every infinite variety of commerce and concerns gives unanimous evidence. Into every well regulated manufactory,—into every extensive mercantile establishment in every part of the civilized world,—it has gradually, but peremptorily, forced its way; and in this country is finding its way into mercantile establishments of humbler grades. The revenues of no government have been safely administered,—the accounts of no government have been intelligibly kept,—the business of no government has been promptly and satisfactorily despatched,—until the commercial system has been introduced with its order and uniformity into the different departments? (Parliamentary Report on Excise Accounts, 1834).

ments" (Parliamentary Report on Excise Accounts, 1834).

In the present article it is proposed to give—I. An outline of the ordinary procedure in recording the transactions of a general merchant;—II. Practical directions for stating the different accounts;—and III. A short account of a modified system adopted for retail business; premising the following general rules:—

Record nothing but facts

Record nothing but facts.

Record facts under their date of occurrence.

Record them under their proper heads of account. Facts of the same character are to be represented by addition; facts of different characters by opposition; but the result of two different species of facts is never to be represented by their difference.

I. Outline of the ordinary procedure in recording the transactions of a general

The double-entry system, according to the practice of most commercial establishments, comprehends three different kinds or classes of books:—lst, Primary Records, or Day-books, for each distinct branch of business—as Cash, Bills, Invoices Inward, Invoices Outward, Sales on Commission, and so on, according to the nature of the trade, and in each of which the transactions are stated circumstantially as they occur. 2d, The Journal, in which all the entries in the primary records are collected and digested monthly in a concise technical form, suited for their being readily transferred into the ledger. 3d, The Ledger, in which the results shown in the journal are arranged under their appropriate heads; and the periodical abstract of which termed a Balance Sheet, exhibits in a succinct form the state of the merchant's affairs.

PRIMARY RECORDS.

Cash Book.—This, though the most important of all, is in its form the most simple. On the left-hand page, or Dr. side, are entered in chronological order all the sums received; and on the right-hand, or Cr. side, in the same order, all the payments. As no money can be paid that has not been first received; it follows that the Dr. side of a cash-book can never amount to less than the Cr. side; the excess of the former above the latter, if any, must, when correctly kept, also correction with the money is heard. respond with the money in hand.

BILL BOOKS.—Bills are either receivable or payable; the former being one of the channels through which debts due to the concern are collected, the latter one of the channels through which debts due by the concern are discharged. Each description has generally a book allotted to itself, both of which should contain spaces for

all particulars inherent and relative to the bill.

The Bills Receivable book should contain appropriate spaces for the following particulars: No.—When received—On whose account—Cr. folio—From whom received—Drawer—Drawee—To order of—Where payable—Date—Term—When due—Sum—When and to whom paid away—Dr. folio.

The Bills Payable book should contain spaces under the following heads: No.—When accepted—On whose account—Dr. folio—Holder—Drawer—To order of—

Where payable—Date of Bill—Term—When due—Sum—When and to whom paid —Cr. folio.

Both books, it will be observed, are furnished with columns for running numbers; which numbers are also written on the face of each bill respectively, and by this means it can be readily referred to and identified.

by this means it can be readily referred to and identified.

Invoice Book Inwards, or Bought Book, is a receptacle for bills of parcels, or accounts of goods purchased.—In some houses these accounts are copied at length in the order in which they are received; while others form this book of blue, or common blank paper, into which the original accounts are pasted.

Invoice Book Ourwards is apprepriated for an account of goods sold on credit at home, or exported abroad. This book being of great importance, should be kept with the utmost precision, and carefully verified before the sums are transferred to the journal and ledger. In extensive concerns, several books of this kind may be kept at the same time, the titles of which can be varied according to the nature of the business. Thus one may be appropriated for Town department, another for Country department, and a third for Foreign department.

Sales Book, or Factors Book, is generally appropriated to accounts of consignments. Each account commonly occupies two pages, a title being placed over both, stating the names of the goods, ship, and consigner. The left-hand page contains an account of the charges incurred, including brokerage, and commission: the right-hand page contains an account of the quantity, price, and amount of the goods sold, with the buyer's name, and the time of payment. The difference between this amount, and the charges on the other side, is the net proceeds for which the consigner receives credit.

the consigner receives credit.

Other books may be kept according to the nature of the business; as a Debentures Book, Insurance Book, &c.; and the common practice, as already noticed, is to set apart books for each distinct department of business. In some houses, however, a Waste Book, or Petty Journal, is appropriated for such occasional trans-

nowever, a Waste Book, or Petty Journal, is appropriated for such occasional transactions as do not fall under any of the preceding heads.

These exhaust the authorities from which it is usual to compile the journal. There are, however, a variety of other books, kept in every counting-house, which do not commonly form part of the materials for the journal, such as the Warehouse Book, Letter Book, Account-Current Book, Account-Sales Book, Petty Cash Book, and Order Book. The Warehouse Book, kept in a similar way to the Factory Book, contains accounts for each parcel of goods belonging to the merchant's own stock, detailing the quantities received, their disposal, the charges incurred, and the quantities on hand. The use of the others is sufficiently pointed out by their names.

JOURNAL.

The journal, as already stated, is a monthly synopsis of all the transactions collected from the primary records, and digested under their appropriate heads of Debtor and Creditor. It usually contains,—lst, A column for the day of the month; 2d, A column for the folio of the ledger where each account is posted; 3d, A space for narrative; and, 4th, Two money columns. The rules for distinguishing Dr. and Cr. are to be inferred from the nature of the transactions and the accounts in the ledger. In personal accounts nothing is plainer than who are Dr. and Cr.; in actual business this is not only understood but felt. The following are the most general rules that can be given.

whatever is Received, or the Receiver is Debtor.

Whatever is Received, or the Deliverer is Creditor.

Whatever is Delivered, or the Deliverer is Creditor.

The journal begins with the inventory of stock. Thus if the property of a merchant consist of Cash, £300; Bill No. 57, on P. Hill, due April 3, £500; Goods, £900; Debt due by Peter Gray, £200; Ship Minerva, £400: and his obligations, Bill No. 80, to P. Yates, due Jan. 6, £700; Debt due to Moses Ker, £600. The journal entries will be in this form:—

SINDRIBE DR. TO STOCK.

Cash, Bills Receivable	—No	. 57,	P. H	ill, di	10 Aj	oril 3,		£300 500
Goode, Peter Gray, . Ship Minerva,	• .:	•	•	•	•	•	•	. 900 200 400
-								£2300

B 00	98	B 00

STOCK DR. TO SUND To Bills Payable	-No	. 80, P.	Yat	es, du	e Jan	. 6,	
To Mosss Ker,	•	•	•	•	•	•	600
							£1300

The primary Records are journalized at the end of each month.

In journalizing the CASH BOOK, state

Cash Dr. to Sundries . . . For all money received.
Sundries Drs. to Cash For all money paid.
Specifying particulars, and classing items of the same kind together.

In journalizing the BILL BOOKS,

Bills Receivable Dr. to Sundries . For all bills received.
Sundries Drs. to Bills Payable . . For all bills accepted.
Setting forth names, numbers, and other necessary particulars.

In journalizing the Invoice Book Inwards,

Goods Account, Dr. to A B (the seller) . For amount of goods purchased.

In journalizing the Invoice Book Outwards,

C D (the Person or	whose	account t	he invoice is sent) Dr. to Sundries.
To Goods .	•		For amount of goods.
To Charges .	•	•	For Shipping and other charges. For the Factor's Commission.
To Commission	•		
To Insurance	: n	:	. For Premium of Insurance.
n is an Adventure O	ea 18 to	or direct	onsignment to order. When the transac-

s an Adventure Outward, or direct sale, no Commission is charged.

In journalizing the Sales Book or Factory Book,

Sundries Drs. to Sales on Commission.

E F (the]	Purchae	er)		For Sales on Credit.
Cash		•	•	For ready money Sales.

Sales on Commission, Dr. to Sundries.

To Charges To Interest	٠.	•	For charges at landing, &c. For interest (if charged on advances).
To Commission. To G H (the Consigner)	• .	٠.	For the Factor's Commission. For Net Proceeds.

The journal for the month is then closed by a similar arrangement of the transactions contained in any other Record which the nature of the business may render necessary.

LEDGER.

This book is divided into distinct accounts, corresponding to the different branches of the business, into which are posted monthly the results brought out in the journal. Each account is introduced by an appropriate title; and articles of opposite kinds which belong to the same account, are placed on opposite pages. The left hand page is called the Debtor, or Dr. side of the account; and the right hand page the Creditor, or Cr. side. The difference between the same of the Dr. and Cr. sides is called the Balance.

The secounts in the ledges may be divided into two great branches. The first

and Cr. sides is called the Balance.

The accounts in the ledger may be divided into two great branches. The first forms the accounts of the whole property or capital, technically called Stock, and the second embraces the accounts of the component parts of property. Under the general head of Stock Accounts are comprehended Profit and Loss account, and its ramifications, Commission, Interest, and Charges; the object of these accounts being to collect together the individual augmentations and diminutions of capital, and to transfer the results in one general entry to Stock; and also Private Account, its use being to record all sums put into the business, or withdrawn, so as to keep them distinct from Profit and Loss, and to transfer the result in the same manner in one entry to Stock. The accounts of the component parts of property will depend upon

the nature of the business; but in a general point of view, the whole may be conveniently arranged as follows :-

> 1. WHOLE PROPERTY. Branches. Ramifications. Commission. Profit and Loss. Interest. Stock. l Charges. Private Account.

2. COMPONENT PARTS OF PROPERTY.

Accounts of Money, Real Property, &c. viz. Cash, Bills Payable,
Bills Receivable, Goods, Ships, Houses, Public Stock, &c.
Personal Accounts, viz. Banker, Ordinary Debtors and Creditors.
As by the fundamental law of double entry, every debit must have a corresponding and equivalent credit, and vice versă, it follows that the two sides of the ledger must, if correctly posted, be constantly in a state of equilibrium: It follows likewise from the axiom that "the whole is equal to the sum of all its parts," that the balance of the stock account must equal the aggregate balance of all the other accounts. Hence arises the proof of deuble entry, which consists in abstracting the balances of all the accounts in the ledger, and verifying their accuracy by ascertaining how far the above requisites have been fulfilled. This operation, called balancing the books, is usually performed at the close of the year; at which period, likewise, the gain or loss during the year is indicated by the credit or debit balance brought into "Stock Account" from "Profit and Loss," after transferring to the latter its branches, Commission, Interest, &c., and the differences betwirt the eight and credit sides of the goods and property accounts, after crediting the balances of merchandise sides of the goods and property accounts, after crediting the balances of merchandise and property on hand at their market value. The whole debit and credit balances being then arranged in opposition to each other, will give a condensed view of the merchant's assets and liabilities, and of his capital stock in the following form:—

Dr. BALANCE ACCOUNT.

Cash in hand	463	Bills Payable	£1,500 2,500
Goods, do Ships Houses	1,000	Stock or net capital	£4,000 6,000
Stock in the Public Funds	400 900	-	
Depts Receivable	£10,000		£10,000

II. Practical Directions for stating the different Accounts, including Observations upon Joint Accounts.

STOCK.—This is in truth the account of the merchant himself, or the concern; and in commencing a new set of books, is debited with all the liabilities, and credited with all the assets. Thus the sums given above under the head "Journal," will be entered in the ledger in this form :

To Sundries . £2800 £1300 | By Sundries

The excess of the credit above the debit side, £1000, being the net capital or stock in trade. If at next balance it shall be found that a profit of £300 has been realized,

in trade. If at next balance it shall be found that a profit of £300 has been realized, while £200 has been withdrawn for private expenses, Stock will fall to be credited "By 'Profit and Loes' £300," and debited "To 'A B's Private account," £200." After which the balance at Cr. of 'Stock,' or A B's net capital, will be £1100. Profit and Loss.—During the currency of the year, this account should be debited solely for actual losses, and credited for actual gains; leaving the balances of Commission, Interest, Charges Account, &c. to be transferred at the time fixed for balancing. Some houses amalgamate the whole of these accounts into one general Profit and Loss account; but this is objectionable, especially in large concerns, where it is of importance to preserve all the channels of gain and loss as distinct as possible. A better plan is to open a separate account for Profit, and another for Loss.

The balance arising on Profit and Loss account is transferred "To Stock," or

By Stock," according as the result is gain or loss.

Commission Account is credited for all commissions received for our trouble in transacting business for others. There are seldom any entries to the debit, as the charges for commission made by our agents properly belong to the Goods Account to which they have reference. It is closed by transferring the balance to "Profit and Loss."

INTEREST ACCOUNT contains on the Dr. side all sums paid or incurred for interest

INTEREST ACCOUNT contains on the Dr. side all sums paid or incurred for interest or discount; and on the Cr. all sums received or become due for the same. The difference, at balancing, is transferred to "Profit and Loes."

CHARGES ACCOUNT contains on the Dr. side all general expenses paid or incurred in the business, as rents, taxes, salaries, postages, and incidents. If any of these should be afterwards charged to some other account, the sums so charged are entered to the Cr. The balance is transferred to "Profit and Loes."

In some houses, separate accounts are kept for Export Charges, Charges on Sales, on Commission, &c., such accounts being dissected periodically, and credited by the different parties, or Adventures, for which the charges were incurred.

PRIVATE ACCOUNT contains on the Dr., money, or any thing else withdrawn from the concern for private use. It seldom contains any thing on the Cr. side. The balance is transferred to "Stock." Dr Hamilton and other writers carry private or house expenses to "Profit and Loss;"—but this is improper, as the true profits of business may be £1000 a-year, while the expenditure being £1500, a false loss would be exhibited.

CASH.—Some houses post the ledger directly from the Cash Book, without any

Cash.—Some houses post the ledger directly from the Cash Book, without any intermediate entry in the Journal beyond "Cash Dr. to Sundries" for the mouthly amount of receipts; and "Sundries Dr. to Cash" for the monthly amount of payments; but the more general method in large concerns is that described above under the head "Journal." By both plans, the cash account in the Ledger is usually

der the head "Journal." By both plans, the cash account in the Ledger is usually comprised in twelve lines on each side yearly.

The mode of stating the cash details is simple. When goods are sold for ready money, Dr. "Cash," Cr. "Goods," or account to which the goods belong. When each is received for goods formerly sold on credit, Dr. "Cash," Cr. the purchaser. When goods are bought for ready money, Cr. "Cash," Dr. "Goods," or account to which the goods belong. When cash is paid for goods purchased on credit, Cr. "Cash," Dr. the seller. When money is received of one person for the use of another, or for his own use, Dr. "Cash," Cr. the person for whose use it is received. When money is paid to one person for the use of another, or for his own use, Dr. the person for whose use it is paid, Cr. "Cash." When money is lent, Cr. "Cash," Dr. the borrower. When money is borrowed, Dr. "Cash," Cr. the lender. When a bill is paid, Cr. "Cash," Dr. "Bills Payable." When a bill is discounted, Dr. "Cash," and Cr. "Bills Receivable" for the total amount of the bill; and Cr. "Cash," and Dr. "Interest," for the discount. Interest," for the discount.

BILLS PAYABLE ACCOUNT is credited with all bills accepted, and debited with

those paid; the balance shows the amount of bills unpaid.

Bills Receivable.—This account is debited with all bills received, and credited with those paid, discounted, or otherwise disposed of; the balance shows the bills remaining in hand.

remaining in hand.

In the Renewal of Bills,—1st, If the bill be in your own hands, make A B (the acceptor) Dr. to Sundries; vis. To "Bills Receivable," for the sum of the old bill; To "Interest," for interest for the time the bill is renewed added to the new bill; and then "Bills Receivable" Dr. to A B for the new bill. 2d, If the bill be discounted, or paid away, make A B Dr. to "Cash" when you pay his bill,—and A B Dr. to "Interest" for interest: then "Bills Receivable" Dr. to A B for the new bill. If the new bill, however, be drawn for the same sum as the former, and the interest paid in cash, it is sufficient to enter "Cash" Dr. to "Interest" for the interest, without bringing it to A B's account. bringing it to A B's account.

In the Protesting of Bills.—1st, If the bill be in your own hands, make A B (on whose account it was received) Dr. to "Bills Receivable" for the bill, and A B Dr. to "Cash" or "Charges," for expenses of protest; 2d, If the bill be discounted or paid away, A B Dr. to "Cash" paid his bill with expenses.

Accommodation Bills.—When you receive another person's acceptance, or grant

your own note and receive the proceeds, in either case merely for your own accommodation, enter "Bills Receivable" Dr. to "Bills Payable" for the bill (as you will have to provide for it when it falls due); and when discounted, "Cash" Dr. to "Bills Receivable," and when paid, "Bills Payable" Dr. to "Cash." When you

grant your bill to another, merely for his accommodation, it is sufficient to note the particulars in a "Memorandum Book," or "Register Bill Book," and take an obligation from him that he is to provide for it when it becomes due. If he then be unable to pay the bill, enter A B Dr. to "Cash." Where, however, accommodation bill transactions betwixt two parties are numerous, the best way is to open a

Merchants whose bill transactions are numerous, keep a Register Bill Book, in which all bills they receive, or become bound to pay, are entered in the order in which they fall due, to enable them to regulate their payments without embarance.

Goods Account commences on the Dr. side, with the balance of goods on hand. Goods bought are entered on the same side; and goods sold on the Cr. Charges laid out on goods are entered on the Dr. side, as also discounts allowed on goods laid out on goods are entered on the Dr. side, as also discounts allowed on goods sold; and on the Cr. side discounts received on goods purchased, as well as any other incidental advantage which arises from them. On closing the account, Cr. By "Balance" for value of goods on hand. If the Cr. side is then found to exceed the Dr. the account is to be debited, To "Profit and Loss" for gain; and, if the contrary, it is to be credited By "Profit and Loss" for loss. In some houses, separate accounts are opened in the Ledger for each kind of goods; but perhaps the more general practice is to open only one general account, and leave the gain or loss upon the different parcels to be ascertained from the Warehouse Book.

ACCOUNTS OF SHIPS, HOUSES, &c. are debited with the cost and outlays, and credited with freights, rents, and other receipts. The difference is transferred to "Profit and Loss," after crediting them "By Balance" for their value at the time of closing.

PERSONAL Accounts are debited to Goods, Cash, Charges for Commission, and for every thing we give out; and credited for what we receive either in Goods, Cash, or Charges, &c. Where the transactions with a party are numerous, and of different kinds, several accounts may be opened; thus with A B you may open his "Account." his "Account of Consignments," &c., the balance of all, or any of these, being transferred at certain periods to his "Account Current."

INSURANCE ACCOUNT is stated in various ways, according to circumstances. In the books of a merchant, or person insured, it is debited to the Broker or Insurance Company, for the amount of premium and policy, and credited by the Adventure or person for whose account it is effected; the Broker being debited for Returns,

Company, for the amount of premium and policy, and credited by the Adventure or person for whose account it is effected; the Broker being debited for Returns, Averages, or Losses, to the accounts that were formerly charged with the premiums. Where, however, the merchant acts as his own broker, it will be convenient to open a separate set of Insurance books for the accounts of the different underwriters, &c., and to reserve his general ledger for an Insurance Account, and an account for himself as "Broker," both of which will be stated, as in the former case. In the books of an Underwriter, "Insurance Account" is credited by the broker or party insured for the premium, &c.; and debited to the same accounts for Returns, Averages, or Losses; the difference being transferred at balancing to "Profit and Loss." At balancing, care must be taken to transfer the premiums on current risks to a "Suspense" or "Guarantee Account."

Debenture Account is debited To "Goods" for the drawbacks to be received on goods exported from our own stock, and credited by "Cash" when we receive the same; the balance shows the debentures outstanding.

Goods Received on Commission.—Separate accounts are sometimes opened in the ledger for each consignment; but as this is done in the Sales or Factory Book, it is usual to confine the ledger accounts to two general ones, namely, "Sales on Commission," and "Charges on Sales on Commission." The first is credited by the accounts of the different purchasers for the gross sales; and debited (after each consignment is sold) to "Charges on Sales on Commission" for the amount of charges, to "Commission" for your commission, and to the consigner for the net proceeds; and the balance will consist of the gross proceeds of goods not yet accounted for by you. "Charges on Goods on Commission" is debited to "Cash," &c. for all charges, and credited as already stated: the balance will show the amount of advances remaining to be accounted for to you.

amount of advances remaining to be accounted for to you.

ADVENTURES.—In Adventures Outward, two accounts are generally opened with the foreign agent, "A B Account of Consignments" is debited with the cost of the goods, Insurance, and Charges; and credited by "A B Account-Current" for net proceeds; the difference being carried to Profit and Loss. The account-current is credited by remittances. In Adventures Homeward, the foreign agent's account

is credited by "Goods," or as the case may be, for the amount of invoice and charges; and debited with remittances.

Consignments by you to parties in this country are stated in the same manner as

in Adventures Outward.

Joint Adventures may be stated in various ways. If A and B ship goods conjunctly to Bombay, to the value of £300; of which, £210 are from A, and £90 from B; and the net proceeds realized by Z be £400; the accounts may be stated in this form in A's books, supposing him to be manager, and the profits divisible

• •	3			
Dr. Adventure to Bom		Cr.	Dr. B	Cr.
To Goods £210	By B his i cost	£161	To Adven.his cost £161 By Adven. &c.	£90
To B 90 To Insurance 12		900	To Balance 129 By Z his i net } proceeds . }	900
To Charges 10	ŀ			
322	l		290	290
			'	_
To Profit and Loss 39	l		Dr. Z	Cr.
		-	To Adven. &c. £900 By Balance .	£400
361		361	To B 900	

The balance of £129 is paid to B, on the £400 being remitted by Z. The adven-

The balance of £129 is paid to B, on the £400 being remitted by Z. The adventure may also be stated by A as though it were his own entirely, giving credit to B for his goods, and half the profit.

Branches.—Concerns which have branch establishments should open accounts with each precisely as if they were strangers.

Foreign Money Accounts.—If an account with a foreigner is to be settled in foreign money, we must enter the value of each article reduced to that money in an inner column. If the sums of the inner columns be equal, there is nothing due by the one party to the other; and then, if the sums of the outer columns be unequal, the difference is gain or loss. But if the inner columns be unequal, the balance due from one party to the other must be valued at the current rate of exchange; and after the value is added to the proper side, the difference is gain or loss.

Bad Deer Account is debited to "A B," &c. for bad debts incurred, and credited by "Cash" for dividends, &c., and by "Profit and Loss" for the net loss sustained at the period when the debtor is discharged, or the recovery of his debt has become

hopeles

A preferable mode of disposing of bad debts is to open a "Guarantee Account," and credit it at the period of balancing by "Profit and Loss" for the probable amount of loss by bad or doubtful debts. In this case, the debtor's own accounts are credited for dividends, &c., and afterwards by "Guarantee Account" for net loss. At each succeeding period of balance, a new valuation of bad debts is to be made, and an additional sum credited by "Profit and Loss," if found requisite.

Any other contingency may obviously be provided for in Guarantee Account on the same principle.

the same principle.

PARTHERSHIP ACCOUNTS may be kept in the general ledger in six different ways, namely;—three in which no entries are made until the partners advance their shares; and three in which entries are made previous to the shares being paid in: in the latter an "Account Proper" being opened with each partner, for recording the sums drawn out or paid in, distinct from the "Account in Company" for his share.

1. Cash, or the Article advanced Dr. to Stock, —then

- —then

 Stock Dr. to Sundries.
 To each partner for his share.
 Sundries Drs. to the Partner.
 For the articles paid in.
 Sundries Drs. to Stock in Company.
 For the articles paid in, mentioning each partner's share.

 Stock Dr. to Sundries.

To each partner's Account in Company, for his proposed capital,—then Sundries Drs. to Stock.
Each partner's Account Proper for the

88.me

- 5. Each partner's Account Proper Dr. to each partner's Account in Company, for the capital to be advanced. 6. Sundries Drs. to Stock in Company. Each partner's Account Proper for the proposed capital—and

when the partners pay in their respective shares, the entry by all the three last is "Cash" or the Article advanced Dr. to partners' Account Proper. At balancing the books, if the business has been successful, and the profit is to be divided, enter "Profit and Loss" Dr. to each Partner's Account Proper, but if there has been a loss, these entries are to be reversed. The balance of the Account Proper is then usually transferred to the Account in Company when the latter is kept separate,

and it is not fixed that the capital shall remain permanent. In all cases, interest is to be charged on the partners' accounts, in order to equalize their advances. A preferable mode, however, is to state the accounts in the General Ledger precisely as in the case of a single proprietor, and to adjust the partnership interests in a private Partnership Ledger as follows:—

•	• •				
Dr.	Joint Capital.	Cr.	Dr.	A.	Cr.
To Sundries To Interest To P. & L.	£900 By A, withdra 37 By B do. 300 By balance	wn £210 105 922	To J ^{1.} C. withdra. To Balance	615 By Inte	t C. £600 rest 25 : L i gain 900
	£1237	£1937		€895	€825
Dr.	Interest.	Cr.	Dr.	В.	Cr.
To Sundries	£37 By Joint C.	£37	To J. C. withdra.	£105 By Join 307 By Inter	t C. £300
Dr.	Profit and Loss.	Cr.		By P. &	L gain 100
To Sundries	£300 By Joint C.	£300		£412	£412

Joint Capital is debited at the outset to each of the partners for his capital; at balancing it is debited to "Interest" for the interest arising on the capital; to "Profit and Loss" for gain; and credited by each of the partners' accounts for the sums withdrawn. It is thus just the Stock Account of the General Ledger reversed.

Interest is credited by "Joint Capital" for the interest arising on it; and debited to the partners for their respective shares.

Profit and Loss is credited by "Joint Capital" for net gain; and debited to the partners' accounts for their respective shares.

Partners' Accounts are credited by "Joint Capital," "Interest," and "Profit and Loss," for their respective shares of capital, interest, and gain, and debited to "Joint Capital," for the sums withdrawn.

"Joint Capital" for the sums withdrawn.

III. Outline of a Modified System adapted for Retail Business.

It is a common prejudice that the retailer, from the minuteness of his sales, is It is a common prejudice that the retailer, from the minuteness of his sales, is unable to keep his accounts on the same systematic principles as the merchant. The difficulty, however, applies solely to the quantities of goods, and in no respect to the money accounts which, in all businesses, are composed of expenditure and returns, receipts and payments. These particulars the retailer can ascertain as easily as the merchant, and therefore he may with equal facility systematize his accounts. In the simple form given below, the only books employed are a Cash Book, a Day Book, and a Ledger into which the two former are posted directly without the intervention of a Loverel. without the intervention of a Journal.

The Cash Book differs from ordinary books of this kind in having an inner column on each side titled "Store." In the inner column on the Dr. side are entered column on each side titled "Store." In the inner column on the Dr. side are entered the cash drawn for ready-money sales and discounts received; and in the credit inner column, ready-money purchases, discounts allowed or paid, and all charges of a general nature. The amount of each of the inner columns is transferred monthly to the outer, and then posted to "Store Account" in the Ledger. In the annexed form the ready-money sales are entered weekly, but in practice they should be entered daily unless a petry cash book is kept for that purpose; in which case they may be transferred when convenient.

The Day Book forms a chronological record of all the other transactions: the

The Day Book forms a chromological record of all the other transactions: the purchases on credit are extended into the column titled "Store Dr.;" the sales on credit to that titled "Store Cr.," and any other transactions which may occur are expressed in the journal form, and entered in an inner column. The two outer columns are summed monthly, and their amounts posted to "Store Account," as

The Ledger is extremely simple, and will be readily understood on inspection. The Store account combines a goods and charges account; and at closing, the value of the goods on hand, as ascertained by inventory, is stated to the credit as a balance, and the excess of the credit above the debit side, being the profit realized, is transferred to Stock account.

The period embraced by the transactions is one month, but the procedure is the

same throughout the year. The operation of balancing is here for illustration performed at the end of the month, when the closing stock entries are stated in the journal form at the end of the Day Book.

Dr.	CASH BOOK.	C	k .
Feb. 1 7 8 14 21 25 28.	To Stock £ 500 To Store, cash sales 15 To Store, cash sales - 16 To Store, cash sales - 17 To Store, cash sales - 18 To Store, cash sales - 19 To Store, cash sales - 19 To Store, cash sales - 14 To Store, cash sales - 15 To Store, cash sales - 16 To Store, cash sales - 16 To Store, cash sales - 17 To Store, cash sales - 18 To Store, cash sa	40 1 1 19 	205 200 5 6 54 80 639
	DAY DOOR	I	
10.	DAY BOOK. To John Smith, for 1000 lbs. tea, at 4s	200 250	19 60
28.	By J. Bell for 4 lbs. tea, at 5s £ 1 40 lbs. sugar, at 6d 1		2
ì	Store Account, Dr. for purchases on credit this month Store Account, Cr. for sales on credit this month Stock Dr. to A B Private Account, balance of latter transferred - £11	450	74
	Store Account Dr. to Stock, gain on former transferred - £21		
Dr.	LEDGER.	C	r.
Feb. 28.		•	E500 91 E521
Dr. Feb. 28.	To Cash To Cash To Sundries, per Day B. To Stock for gain To Stock for gain	d	£67 74 384 £495
Dr. Feb. 1.	Bank To Cash lodged £285 Peb. 23. By Balance	C	r. £285
Dr. Feb. 20.	Bills Receivable To J. Bell, due June 18 £60 Feb. 25. By Cash, disca J. Bell's bi	C: En	r. £60
Dr. Feb. 13. 28.	To Cash, family expenses - £5 Feb. 28. By Stock transferred - 6	C	r. £11

BOR 10	5 BOT
--------	-------

Dr.	John Smith.	Cr.
Feb. 8.	To Cash, discount £10 £200 Feb. 2. By Store, 1000 lbs. tea, at 4. To Balance 250 10. By Store, 100 ewt. sug., at 6.	L£200 i0a. 350
Dr.	J. Bell	Cr.
15.	To Store, 48 lbs. tea, at 5a. To Store, 30 cwt. sugar, at 60s. To Store, tea and sugar To Store, 48 lbs. tea, at 5a. E12 Feb. 14. By Cash, discount £1 - 60 90. By Bills Rockin, due June E74 E74	£19 60 £74
Dr.		Cr. £250 510
	£760	£760

If the concern is a partnership, the accounts may be kept precisely as abeve, and the interests of the partners adjusted in a private ledger, according to the form given in last section. In this ledger should also be engrossed the Inventory and Valuation of Stock, and the Balance Account.

BORACIC ACID is obtained artificially by the action of sulphuric acid upon borax; and in a natural state in the hot springs of Sasso, near Florence, and in the Lipari islands. It occurs in small brilliant colourless crystals, which have a greasy feel: it is inodorous, and possesses little taste. This acid is used in the manufacture of borax, as well as in chemical investigations. About 6000 cwts. are annually imported into this country.

BORAX, a salt procured in an impure state, called tincal, or rough borax, from a lake in Thibet, about fifteen days' journey from Teeshoo Lomboo, from whence nearly the whole European market is supplied by way of Calcutta. Tincal, as imported, is embedded in a kind of scapy matter; its crystals are soft and brittle, colourless, yellowish or greenish, sometimes nearly transparent, but more commonly opaque. When purified, it is called borax, or borate of soda, and occurs in rather large white semitransparent crystals, having a sweetish alkaline taste. When heated, it becomes a porous friable mass, called calcined borax. Borax is also prepared artificially in England and France from its ingredients, boracic acid and soda. This salt is employed in medicine, but is chiefly used as a flux in the arts. About 1500 cwts. are annually brought to this country, nearly one-half of which is again re-exported.

1600 cwts. are annually brought to this country, nearly one-half of which is again re-exported.

BOTARGA, a substance similar to caviare, prepared on the coasts of the Mediterranean, from the spawn of a kind of mullet. It is very firm, of a deep reddish colour, and has two lobes about nine inches long. The best is made at Tunis.

BOTTLES (Dn. Bottels. Fr. Bouteilles. Ger. Bouteillen. It. Bottiglie; Fiaschi. Por. Botelhas. Rus. Bulilki. Sp. Botellas.) [GLASS.]

BOTTOMRY is a contract by which money is borrowed on the joint security of a ship and its owners, repsyable on the ship terminating her voyage successfully. It corresponds with Respondentia, which is a similar method of raising money on the cargo. [Respondentia, which is a similar method of raising money on the cargo. [Respondentia]. It may be executed either by bill on the part of the borrower, or by a mutual bond, provided the conditions be clearly expressed. At home, the contract is entered into by the owners, or by the master as their agent. The master has full authority in a foreign country to bind the owners, and hypothecate the ship and freight by a bottomry-bond, in cases of necessity. " If it be made," says Mr Smith, " by the owners themselves in this country, before the commencement of the voyage, the lender has not the same convenient remedy by suit in the Admiralty against the ship, as he has in the case of hypothecation for necessaries by the master in a foreign port, and if the contract refer to a British ship, of which it purports to be an assignment, compliance with the provisions of the Registry Act seems necessary to its validity" (Mercantile L. 548). In Scotland, according to Professor Bell, "to make the debt effectual, the proceedings are in Admiralty [now the Court of Session] by an application for the sale of the ship, and payment of the bottomry debt, or a warrant against those who owe freight." The bond may take any amount of interest without being liable to the usury laws, a privilege of less consequence than it formerly was. [Usu

continues with the sea risk—when that ceases, the interest, which continues to run, is restricted to the ordinary rate. Where the master hypothecates the ship for interest exceeding 5 per cent., the lender has a personal claim against the master, but none against the owner. Where there are several bonds of bottomry, and the value of the ship is insufficient to meet them all, the last, if absolutely necessary, is preferred, as having had the chief tendency to the preservation of the vessel. (Abbott, 117-181. Marshall on Insurance, 742-769. Smith's Mercantile L. 346-351. Ball's (Dm. i. 550-566)

(Abott, 117-131. Marshall on Insurance, 742-769. Smith's Mercantile L. 346-351. Bell's Com. i. 530-556.)
BOUGHT-AND-SOLD NOTE. [Broker].
BOUNTY, a premium given by a government for the encouragement of a particular branch of industry. The granting of bounties formed, until lately, a prominent feature of the commercial policy of this country. A graduated allowance per yard was paid on all linen exported, in order to encourage the home manufacturer, and enable him to meet foreign competition; four shillings were granted on each barrel of cured gutted herrings; and £1 per ton on every vessel fitted out for the whale-fishery, in order to promote the fisheries and the rearing of seamen. Encouragements were given to other trades on similar principles; and in 1824 the total sum paid under this head amounted to £536,228. The impolicy of bounties had by this time, however, been rendered evident by the writings of Smith and Ricardo. It was now acknowledged that individual interest is of itself sufficient to prompt It was now acknowledged that individual interest is of itself sufficient to prompt men to engage in all trades of a really advantageous nature;—that the production and exchange of commodities fall into the most profitable channels when left to themselves; and that as often as they are diverted from those channels by external interpositions of any sort, so often the industry of the country is made to employ itself less advantageously, and those engaged in it rendered comparatively indifferent to improvements. The principle of bounties was accordingly abandoned by government. The tonnage duty paid on whale ships ceased in 1824; and the bounties on herrings, linen, and other articles were repealed in 1830.

bounties on herrings, linen, and other articles were repealed in 1824; and the bounties on herrings, linen, and other articles were repealed in 1830.

"We cannot give our workmen a monopoly in the foreign as we have done in the home market. We cannot force foreigners to buy their goods as we have done our own countrymen. The next best expedient it has been thought therefore is to pay these for buysing. Bounties, it is allowed, ought to be given to those branches of trade only which cannot be carried on without them. But every branch of trade in which the merchant can sail his goods for a price which replaces to him, with the ordinary profits of stock, the whole capital employed in preparing and sending them to market, can be carried on without a bounty. . . . Those trades only require bounties in which the merchant is obliged to sell his goods for a price which does not replace to him his capital, together with the ordinary profit; or in which he is obliged to sell them for less than it really costs him to send them to market. The bounty is given in order to make up this loss, and to encourage him to continue or perhaps to begin a trade of which the expense is supposed to be greater than the returns, of which every operation eats up a portion of the capital employed in it, and which is of such a nature that if all other trades resembled it there would soon be no capital left in the country. The trades which are carried on by means of bounties are the only once which can be carried on between two nations for any considerable time together, in such a manner as that one of them shall always and regularly lose, or sell its goods for less than it really costs to bring them to market. But if the bounty did not repay to the merchant what he would otherwise lose upon the price of his goods, his own interest would soon oblige him to employ his stock in another way, or to find out a trade in which the price of the goods for less than it really costs to bring them to market. But if the bounty did not repay to the

BOURBON, an island in the Indian Ocean subject to France. It lies about 90 miles S.W. from Mauritius, and is 440 miles E. from Madagascar. Area 895 British square miles. Population in 1836, 106,099, of which 69,296 were negro slaves. The chief town and port is St Denis, situated on its northern side, in 20° 50′ S., and 55° 31′ E.; pop. 12,000. It possesses no close harbour, but only an open and dangerous roadstead.

The island consists of the heights and slopes of two mountains, the most southerly of which contracts of the heights and slopes of two mountains, the most southerly of which contracts in the sland consists of the heights and slopes of two mountains, the most southerly of which con-

and dangerous roadstead.

The island consists of the heights and slopes of two mountains, the most southerly of which contains a volcano in perpetual activity. A great part of the interior is a volcanic desert; but the districts on the coast are generally fertile. The climate though humid, is pleasant and salubrious; hurricanes are, however, frequent and violent. The staple product for exportation is sugar; there are also extensive plantations of coffee and cloves. The forests abound in a variety of fine timber and dye-woods; and ambergris, coral, and turtle, are found on the shores. The total value of articles exported in 1836, of the growth and produce of the island, was 16,743,899 fr. (or £669,756); the principal being raw sugar, 18,173,092 kilogrammes, value 18,721,164 fr.; coffee, 990,013 kit-cores, 556,660 kilogrammes, value 1,366,018 fr.; cores, 556,660 kilogrammes, value 1,366,018 fr.; cores, 556,660 kilogrammes, value 1,367,018 fr. (or £550,789), consisting chiefly of cottons and other manufactured goods, with rice, wheat, oils, wine, cattle, timber, and salt. The principal commercial intercourse is with France, where the bulk of the produce of the island is exchanged for cattle, &cc.,—India, to which cloves and other articles are sent in return for rice,—and the neighbouring island of Mauritius.

Measure, Weights, and Money, same as France.

Resense in 1837, 2,149,563 ft., or £85,862; expenses, 2,932,438 ft., or £117,297. \$

BOX (Fr. Buis), a small tree (Buxus sempervirens), now very scarce in this country, but common in the south of Europe and west of Asia. Its wood, which is unique and highly valuable, is close, hard, heavy and durable, of a yellowish colour, cuts better than any other, and is the only kind adapted for engraving. It is also used for the wooden part of fine tools, snuff-boxes, and for a variety of purposes requiring strength, beauty, and polish, in timber. A late reduction of the duty from £5 to 10s. per ton (6 & 7 Wm. IV. c. 60), has led to a greatly increased consumption of boxwood and about 700 tons are now annually imported, chiefly from sumption of boxwood, and about 700 tons are now annually imported, chiefly from Turkey and Spain.

Turkey and Spain.

BRACIO, an Italian cloth measure, varying in different places from about 21 to 26 imperial inches.

BRAN, the husks of ground corn.

BRANDY (Fr. Eau de vie de vin. Ger. Brantswein. It. Aquarsente. Por. Aquardente. Sp. Aquardiente), a spirit distilled from wine, and from the more, or fermented residue of pressed grapes. In general it is obtained from wine of inferior quality, fit only for making brandy. The product of the distillation is at first colourless, but it obtains a certain degree of colour by age. Most commonly, however, it is coloured artificially by mixture with burnt sugar and sunders-wood. The quality is of course dependent both on the material from which it is procured, and the skill with which it is manufactured. Mare brandy is said to possess a more acrid flavour than that obtained from wine.

Brandy is manufactured in most wine countries, but the best, and almost the only

more acrid flavour than that obtained from wine.

Brandy is manufactured in most wine countries, but the best, and almost the only kind imported into Britain, is made in France. The quantity annually prepared in that country is estimated, though somewhat vaguely, at about 20,000,000 galls., of which nearly one-third is exported. The finest, made at Cognac, in the department of Charente, is said to be procured from white wine fermented so as not to become impregnated with the oil of the grape skin. The Cognac brandy is shipped mostly from the port of Tonnay on the Charente; but brandy forms likewise a valuable export from Cette, Bordeaux, Rochelle, and Nantes. Besides the British, the Anglo-Americans and Dutch take considerable quantities of it. but the exports to other countries are comparatively trifling. That exported of it; but the exports to other countries are comparatively trifling. That exported from Spain is shipped chiefly at Barcelona for Cuba, Mexico, and the South Ame-

rican States.

The extravagant duty of 22s. 6d. per gallon levied on foreign spirits has materially checked the use of brandy in this country; indeed the quantity at present entered for home consumption is much less than it was fifty years ago. In 1790, when the duty was 6s. the annual consumption was about 1,700,000 gallons (Imp. meas.). At present, although it has somewhat increased of late years, it averages only about 1,400,000 gallons annually. A considerable quantity, however, is besides introduced in an irregular manner, as a contraband trade is carried on with activity along the coast of the Channel.

is besides introduced in an irregular manner, as a contraband trade is carried on with activity along the coast of the Channel.

In 1838, the quantity of brandy imported amounted to 2,398,135 Imp. galls. (including overproof), of which 2,300,122 galls. were from France; the quantity entered for home consumption was 1,203,435 galls.; and the quantity re-exported to 1,010,851 galls. (proof). Of the latter, there were sent to British America. 291,609 galls.; British West Indies, 215,531 galls.; Cape of Good Hope, 89,363 galls.; United States, 57,514 galls.; East Indies, 106,173 galls.; can daught a galls.; besides smaller quantities to the West Coast of Africa, to the South American States, especially Chill and Peru, to the Canaries, and to other places. The quantity under bond in this country is usually about 1,300,000 galls.; and that in the stocks of dealers about 500,000 galls. [Briarrs.] \$\frac{1}{2}\$ BRANK. [Briarrs.]

BRANK. [BUCK-WHEAT.]

BRASS, an important alloy of copper and zinc, usually prepared by cementa-tion of calamine, a native carbonate of zinc, with granulated copper. Sometimes blende, a native sulphuret, is employed instead of calamine. It is of a fine yellow colour, susceptible of a high polish, and is little liable to rust. It is very mal-leable, and ductile when cold: at a high temperature it is brittle. Sp. gr. 7.8 to 8.4. It is more fusible, sonorous, a worse conductor of heat, and harder than copper. The relative proportions of the two metals vary in the different kinds of brass; but there is seldom less than one-ninth, or more than one-fourth of zinc. Brass has been known and used from the earliest ages. Its colour and other properties recommend it in preference to copper for many purposes in the arts, and it is extensively employed both for useful and ornamental purposes. From being readily turned on a lathe, it is well adapted for philosophical instruments, and those used in manufacturing processes. It is besides used in the manufacture of a great variety of articles, such as buttons, chandeliers, lamps, vases, fenders, fire-screens, BRA 108 BRA

and lock and door handles. When drawn into fine wire, it is extensively employed in pinmaking, and for other purposes. It is also beaten into thin leaves, which, under the name of Dutch leaf or Dutch gold, are used in making trinkets (Brande's Chemistry, &c.). The great seat of the brass manufacture is Birmingham.

Chemistry, &c.). The great seat of the brass manufacture is Hirmingham.

"The use of this valuable compound metal has continually increased during the last hundred years, and the talant of the designer has been tasked in the invention of new forms, and in the adaptation of classical models to the purposes of modern domestic comfort and ornament. The introduction of the stomp especially, which was first applied to the multiplication of copies of smaller wares, as buttons, buckles, and cloak plass, and which was at length adapted by increasing its power, to the production of large forms, has caused the greatest change in this branch of manufacture. The process of casting, though preferable for many articles, is tedious; the forms require considerable repairing and finishing after they leave the sand, and the metal is necessarily so thick as to be for many purposes inconveniently heavy; but the stamp brings up the work on the die on light rolled sheet metal, so that the most intricate and involved patterns are executed with the greatest precision; and by the ingenious application of separate parts, the work of the curver and gilder in large decorated please of soroll and foliage is successfully imitated." (Pes. Cyclopedia, art. Birmingham.)

BRASSAGEs sharpens for mint avrantages.

BRASSAGE, charges for mint expenses

BRASSAGE, charges for mint expenses.
BRAZIL, an extensive empire lying in S. America, between lat. 4° N. and 33° S.; and between long. 35° and 73° W. It is bounded N. by Venezuela, French Guiana, and the Atlantic; S. and S. E. by the Atlantic; S. W. and W. by Uruguay, Paraguay, Argentine Republic, Peru, Ecuador, and New Grenada. Area about 3,000,000 square miles. Population vaguely estimated at 5,000,000; of which 1,000,000 whites, of Portuguese origin; 2,300,000 negro slaves; 300,000 Indians; and 900,000 free blacks and mixed races. It is divided into 18 provinces, namely, Para, Rio Negro, Maranham, Piauhi, Ceara, Rio Grande del Norte, Parahiba, Pernambuco, Alagosa, Sergipe, Bahia, Espirito Santo, Rio Janeiro. San Paulo, Minas Geraes, Goyax, Matto Grosso, Fernando. Capital, Rio Janeiro. The government is a constitutional monarchy; the executive is vested in the monarch or emperor; the legislative body consists of a senate chosen by the emperor, and a chamber of deputies elected by the people. chamber of deputies elected by the people.

vertament is a consistantional ambarony; the legislative body consists of a senate chosen by the emperor, and a chamber of deputies elected by the people.

The physical character of Brazil is as yet but imperfectly known, but so far as ascertained, it appears to be a country of vast natural capabilities. A ridge of mountains runs parallel with and at no great distance from the coast, from 10° to 35° S. lat. In the W. the land again rises to the height of from 3000 to 8000 feet, spreading out into those sandy place called Campos Parezis, which occupy the centre of S. America. Nearly one-half of the surface is composed of uplands. The lowlands extend principally along the sides of the river Amazon, with smaller portions on the shores, and on the S.W. border. In a country equal in extent to nearly 4-56h of Europe, the productions must be very much diversified; but the greater part of its covered by vast forests, considerable portions of which have been only partially explored. The mineral productions, so far as known, are chiefly gold, diamonds, iroz, and saft. The province of Minas Geraes is the richest in gold and diamonds; and what is called the "Diamond District" extends about 50 miles from N. to S., and 25 miles from E. to W. around the sources of the Rio Francisco, and the Rio Francis, and adjoining Tejuco, about 400 miles N. from Rio de Janeiro, where nearly 2000 persons are employed by government in collecting the stones. Gold abounds chiefly in this province, in the affinest of the Rio Francisco, but it is found likewise in all the head waters of the great rivers which flow northward into the Amazon. About the middle of last century, the annual produce was about 35,000 marcs; but, owing to the exhaustion of the surfrous smal from which it was washed, the amount decreased, and betwirt 1800 and 1820, averaged only about work the veins in the mountains, particularly at Congo Soco, near Sebara, about 380 miles N. from Rio, and the produce is again doubtless more considerable. The forests accommended to the pr

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the province of Rio de Janeiro, where the quantity raised is very great, and is yearly increasing. It is likewise raised, but to a comparatively trifling extent, in the northern provinces; also in some of the initiated ones, particularly Minas Gerases. The collivation of tobacco, formerly so extensive, in now on the deciling; the best is grown near Bahla. Rice is raised principally in the case of the control of the seaports, and receiving Ruropean manufestures in exchange. Minds form the common means of transport, as the reads seldom admit of the use of certages, and as yet there is no inland navigation of a number of large rivers interest the country in various directions; but very little is known reparting and compared to compare the control of the Rich of the Ruropean manufestures in the Ruropean manufesture in Ru

£500,000.

Bahiz is situated in 13° 1′ S. and 38° 38′ W. in the capacious bay of All Saints, with an excellent harbour; pop. 130,000. The anchorage is abreast of the city, a mile and a half distant, in 8 to 12 fathoma. Bahiz was formerly the capital of Brazil, and though now subordinate to Rio, is still a place of great consideration. It is strongly fortified, and possesses both public and private ship-building yards. Exports, sugar, cotton, coffee, hides, tobacco, famey woods, and drugs. The imports in 1838 amounted to £1,415,£21, of which £942,856 were from Britain.

Rio de Jaseiro (formerly 81 Sebastian), in 22° 56′ S., and 43° 9′ W., is beautifully situated on the western side of a small bay, forming one of the most magnificent natural harbours in the world; pop. about 200,000, two-thirds being blacks and mixed castes. The city lies about 4 miles from

the entrance to the bay. To the right on entering is the fort of Santa Crus, within hall of which all vessels going into the harbour are required to pass, in order to answer any questions that may be put to them. Rio is the seat of more than one-half of the foreign commerce of Brazil; and it has likewise a very extensive inland trade, particularly with the provinces of Minas Gerases, Goyaz, and Matto Grosso. It is the key to the mining districts,—furnishing all their supplies and receiving all their produce for shipment or other disposal. Exports, coffee, nearly 60,000 hags, each of 5 arrobas or 160 lbs.); sugar, about 20,000 cases (each from 1900 to 2000 lbs.); hides, No. 300,000; cotton, tailow, drugs, dyes, gold, and diamonds; the imports, of manufactured commodities of all kinds, flour, dried flab, wine, and brandy. The value of foreign goods imported into Rio in 1835, according to a statement given in the Jornal do Commercio, was £3,839,379; of which from Britain, £3,005,843; France, £361,71; Portugal and her possessions, £31,895; United States, £228,383; Hansestic Bates, £28,384; Uruguay, £96,857; Belgium, £73,769; Spain, £61,270; Sardinia, £56,223; Argentine Republic, £44,884; Holland and her colonies, £37,046; Sidly, £32,319; Sweden, £31,899; Chili, £36,132; Austria, £4,067; Sundries, £31,164. These imports are exclusive of negroes, of whom vast numbers continue to be brought from Africa to this port or the neighbouring coast.

mrasures, wrights, money, pinances, &c.

The Measures and Weights are nominally those of Portugal; but there are some variations. In trade, the following proportions are usually observed: 5 warss = 6 Imp. yds.; 4 covados = 3 Imp. yds.; 99 Brasilian lbs. = 100 lbs. avoirdupois. At Rio Janeiro, 100 medidas = 73 Winchester bushels. At Bahia, 1 canada = 13 Winchester bushels. At Bahia, 1 canada = 13 Winchester bushels. At Bahia, 1 canada = 14 Winchester bushels. At Maranham, the alqueires = 14 Winchester bushels. At Maranham, the alqueire = 14 Winchester bushels. At largueire = 15 Winchester bushels. At largueire = 15 Winchester bushels. At largueire = 15 Winchester bushels. Money—The integer of account is the rea, and 1700 reas make 1 mirea (1 5000), the value of which fluctuates, being reckoned in depreciated government paper, or in a debased and irregular bushel. London was recently quoted at Rio Janeire. Winchester bushels. At the northern ports of Persambuco, Maranham, and Para, the currency is principally copper. A conto is 1000 5000.

The paper money is in the form of imperial bank or rather treasury notes for one milres and upwards, which are inconvertible; and the copper money; in pieces of 40, 20, and 10 reas. The amount in circulation was lately stated to be about 33,500 contos of paper, and 6500 contos of copper money; in all 40,000,000 5000.

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Brazil is said to have been discovered a. n. 1500 by Pincon, a Spanish navigator, one of the companions of Columbus; but it was taken possession of in the same year by Pedro Alvarez de Cabral, an admiral of Emanuel, king of Portugal, by which country it was soon afterwards colonised. In 1806, in consequence of the invasion of Portugal by the French, the royal family removed to Brazil, and remained there till 1821. In 1822, Don Pedro, the crown prince of Portugal, who had been left by his father Regent of Brazil, was proclaimed emperor by the inhabitants; and in 1823 a constitution was adopted. In 1831, an insurrection broke out, which led to the abdication of Pedro I. in favour of his infant son. [PORTUGAL.]

BRAZILETTO, a kind of brazilwood (*Casalpinia Braziliensis*) of very inferior quality which grows in the West Indies. It is imported from the Bahamas and Jamaica.

BRAZIL-NUTS, the seeds of Bertholletia excelsa, a remarkable plant, of which there are large forests on the banks of the Orinoco. About thirty of these nuts are contained in cells within a hard spherical fruit nearly the size of a man's head. They are wrinkled triangular substances, having pure white kernels or almonds, which form a delicious fruit when fresh, and also yield a large quantity of oil suited

for lamps. They are exported to Europe from Para and French Guiana.

BRAZILWOOD (Fr. Bois de Brésil. Ger. Brasilienhols. Por. Pao Brasil.

Sp. Madera del Bresil), a valuable dye-wood, the product of a tree (Casalpinia echinata) which grows in various tropical countries, but is found in greatest abundance, and of the best quality, in the province of Pernambuco in Brazil, where it is known as pao de Rainha, or Queen's-wood, from being the subject of a royal monopoly. The tree commonly grows in dry places and amid rocks, and seldom exceeds thirty feet in height. The only valuable part is the heart, which, after being freed from the thick bark and white pith, is only about one-half of the bulk of the trunk. Brazilwood is ponderous and hard; and when first cut is of a pale red, but becomes darker by exposure to air. It is variegated with irregular black spots, has a sweetish taste when chewed, and gives out its colour with water, a property by which it is distinguished from saunders-red or sandal. The thick and close-grained pieces are preferred. The wood is susceptible of a good polish, and is occasionally used by the turner and cabinetmaker, but it is chiefly employed as a red dye. It is often used for giving to silk a crimson hue, in the manufacture of red ink, and in the preparation of a brilliantly red lake. Price in bond from £50 to £85 per ton.

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BREAD is in this country made almost wholly from wheaten flour. It may be divided into biscuit bread and loaf bread. Biscuit bread is made solely from flour and water without undergoing any fermentation; and after being kneaded, flattened out, and baked, is compact, heavy, and hard. Loaf bread is made by working the flour into paste with water, yeast, and a little salt, allowing it to stand until a certain degree of fermentation takes place, and then baking it in an oven heated to about 488 Fahr. During the fermentation, a quantity of gas is formed, and as it is prevented from escaping by the toughness of the paste, and dilated by the heat of the oven, the bread is rendered light, porous, and soft. Many bakers add potatoes to the flour. This admixture neither injures the quality nor the wholesomeness of the bread; but adulterations which are not so innocent are sometimes had recourse to, for the purpose of concealing the taste of damaged flour, or

wholesomeness of the bread; but adulterations which are not so innocent are sometimes had recourse to, for the purpose of concealing the taste of damaged flour, or to make the bread white when formed of inferior flour. The use of alum is liable to this objection, as being positively injurious to health; it is employed to lighten the dough. (See Dr Colquhoun on the Art of Baking Bread, Annals of Philosophy, vol. 28. Donovan's Domestic Economy.)

The quantity of bread produced by the same weight of flour depends in some measure upon the properties of the corn. A Winchester bushel of wheat of fair quality, weighing 60 lbs., is usually calculated to yield 48 lbs. of household flour, which is the sort chiefly used for the manufacture of bread throughout England. When the assize of bread was fixed by the Lord Mayor of London, a sack of flour (280 lbs.) was calculated as sufficient to make 84 quartern loaves of 4 lbs. 5 os. each. The bakers, however, admit that if the flour be of good marketable quality, it will make 86 such loaves, or 370 lbs. 14 oz. of bread, equal to 923 loaves of the it will make 86 such loaves, or 370 lbs. 14 oz. of bread, equal to 924 loaves of the

present weight of 4 lbs. each.

present weight of 4 lbs. each.

Frautrova Resoulartora.—In England (beyond the London district), and in Scotland, the baking of bread is regulated by the statute 6 & 7 Wm. IV. c. 37, the chief enactments of which are as follows:—Bakers must sell bread by weight (except French or fancy bread or rolls), under a penalty not exceeding 40a; and must use avoirdupois weight, under a penalty not less than £3 or more than £3 (\S^2_3 , \S^3_3). Bakers must keep scales in their places of sale, in order to weight the bread when required, under penalties (\S^2_3 , \S^3_3). The regulations apply to bread made of flour, or meal, of wheat, barley, rye, cats, buck-wheat, Indian corn, pease, beans, rice, or potaces, and with any common salt, pure water, eggs, milk, barm, leaven, potacor or other yeass, and with no other ingredient (\S^2_3). There are heavy penalties for adulteration (\S^2_3) and 3 Geo. IV. c. 106; and in Ireland by the act 1 Vict. c. 20. These acts contain regulations similar to the above.

In former times, the peasantry of these kingdoms used only bread made of rye, oats, or barley-meal, and that of wheat was exclusively devoted to the higher classes; indeed, so prevalent was the employment of inferior substitutes for this "staff of life," that in the description of a farmer establishment as depicted in the "Vision of Piers Ploughman," supposed to have been written in the fourteenth century, we find

"A few croddes and creyme, and a cake of otes,"
And bred for my barnes of beanes and of peses,"

And over for my barnes of beanes and of peess,"

in common use by persons of that class. In later times, the increase of the comforts of life gradually introduced wheaten bread into more general consumption; and now all other grain has nearly disappeared in the formation of our household loaf; though the use of oat and barley cakes, and of cats in the shape of "strabout" and "porridge," is indeed still common among the labouring classes of Scotland and Ireland; while, in the north of England and some parts of Wales, a mixture of rye and wheat, under the name of "mediln," is usual among respectable families. In the north of Europe the use of rye-bread is still universal.

BREAD-FRUIT-TREE (Artocarpus incisa) is a native of the South Sea islands, East Indies, and other tropical countries. It is about forty feet in height, having a trunk commonly from one to two feet in diameter, and a large umbrageous head; it bears in about five years, and will probably continue prolific for fifty. The fruit, which, in the South Sea islands at least, is produced two or there or even four times a-year, is something like a roundish or oval melon, with hexagonal marks, and six or eight inches in diameter. The seedless variety is most esteemed, and its substance when washed resembles the crumb of wheaten bread. Mr Ellis,

the missionary, considers the bread-fruit as the staff of life to the South Sea islanders; and Dr Solander called it "the most useful vegetable in the world," and urged that no expense should be spared in its cultivation. The mere idea of bread growing spontaneously was doubtless calculated to excite attention,—almost, perhaps, as strongly as the subsequent description of Byron :-

"The bread-tree, which, without the plonghshare, yields
The unreap'd harvest of unfurrow'd fields,
And bakes its unadulterated loaves
Without a furnace in unpurchased groves,
And flings off famine from its fertile breast;
A priceless market for the gathering guest."

The wood is useful, and equally so the gum that exudes from it. The bread-fruit-tree was introduced by the British government into the West Indies; but it is not reckoned equal to the plantain as food. The species, called jack or jacs (Artecorpus integrifolia), is a larger tree than the preceding, the trunk being, according to Roxburgh, from eight to twelve feet in circumference. The fruit is oblong and very large, sixty or seventy lbs. in weight. As an article of diet it is not much esteemed, though the natives of Ceylon eat it freely.

Some other species grow to a large size, and yield valuable timber, in Bengal and

BREMEN, one of the Hanseatic republics, is situated on the river Weser, about 60 miles from its entrance into the North Sea. It consists of a town and small territory. Area, 67 British square miles; pop. 57,000. The government is vested in a senate and convention of burgesses.

in a senate and convention of burgesses.

The city of Bremen Hes in 53° 4′ N. and 3° 49′ E., and is divided into two unequal portions by the Weser; pop. 41,500. Vessels strawing not more than 7 feet come up to the town, and those drawing 13 feet may come up to Vegessck, about 13 miles below Bremen; but large vessels do not generally ascend higher than Bremen Haven, lying on the E. bank, about 38 miles below the town. Bremen possesses considerable manufactories of refined sugar, tobacco, leather, and other articles; but its importance is derived from its being one of the principal continental ports for the wavebousing and transit of foreign and German commodities. By the Weser, Versa, Fulda, and other channels, it receives produce and manufactured goods (particularly linens) from Hanover, flaxony, Hesse, and Westphalia; supplying these places in return with tropical produce, British, and nearly the same number from the United States. The imports in 1838 consisted of 14,430,000 lbs. coffee; 23,818,000 lbs. tobacco; 14,000,000 lbs. Two sugar; 6600 bales cotton; 3,840,000 lbs. rice; 45,090 tuns train oil; 1,000,000 lbs. butter; 300,000 lbs. cheese; 1,189,000 lbs. hides; 500,000 lbs. tos; 23,000 lbs. indice; 11,000 hids. wine; 500,000 lbs. lineaci, with earthenware and other manufactured goods, grain, metals, dye-stuffs, pices, saltpetre, roain, spirits, currante, art, tallow, and a variety of articles of smaller value; amount to about 19,000,000 rix-dollars, or £2,633,280. The exports by sea amount to about 19,000,000 rix-dollars; tobacco and sunf about 6,000,000 lbs. yearly; soap, starch, refined sugar, syrup, and other manufactures; grain, hams, bacon, bones, bark, oil-cake, rags, chicory, quills, drugs, and lead. Of late vears Bremen has likewise become the chief port for emigration from the Continent to America.

Measures and Weights.—The ell of 2 feet = | Usance of bills from Germany and Holland,

Bremen lbs. = 11 lbs. avoird. nearly. Gold and silver are weighed by the Cologne mark.

Money.—The integer of account is the rix-dollar current of 72 groots, or 360 schwaren; and 5 rixdollars are reckoned equal 1 Carl d'or, or old Louis d'or, worth about 18a 5d. The par of exchange with London is thus nearly R.D. 609 = £100; and 1 R.D. = 3a. 34d.

vears Bremen has likewise become the chief port for emigration from the Continent to America.

Measures and Weights.—The ell of 2 feet = \$2776 Imp. inches, and 100 ells = 632 Imp. yells = 632 Imp. yells = 10 years = 100 years = 10

BRENTA, an Italian liquid measure equal to nearly 16 Imp. galls.

BRICK, a mixture of clay, with sand, ashes, or chalk, dried in the sun, and burned in a clamp, or baked in a kiln into a kind of artificial stone for the use of builders. They are made in very large quantities in England and Ireland; but not in Scotland, where stone is the chief material for building. They are of various kinds, but are almost all moulded of one size, namely 10 inches long, 5 wide, and 3 thick; and when burned, on an average 9 inches long, 4½ wide, and 2½ thick. The best stock-bricks (those from the centre of the clamp, of an equal hard

texture and even colour) are worth from 30s. to 40s. the 1000; the inferior soft red bricks, called *place-bricks*, from 20s. to 30s.; and *clinkers*, or *burrs*, masses of vitrified brick, about 10s. a-load. *Dutch clinkers* are small hard yellow bricks. *Malm-stocks* are carefully tempered bricks made from clay, to which coze, chalk, Main-stocks are carefully tempered bricks made from cisy, to which coze, chair, or marl is added; they are of a fine clear yellow colour, and are used for facility walls and making arches over doors and windows; the softest kind are called culters, from their admitting of being cut with the trowel. Fire bricks are kiln-burnt, from a peculiar kind of clay found in perfection at Windsor, Stourbridge, and in various parts of Wales, whence the varieties derive their names. These last, sometimes called Welsh lumps, stand an extreme heat, and are made of large sizes for more heatless between the content of the purposes. sugar-boilers, brewers' coppers, and other purpose

The duty on bricks was repealed in 1850; it was charged at the rate of 5s. 10d. per 1000, more or less, according to the size and polish of the bricks. It was an impolitic tax like all taxes on buildings materials, and was first imposed in 1784 by Mr. Pitt. The construction of railways and vast increase of house-property and manufactories, has augmented immensely the consumption of bricks. In England, the number charged annually with duty was about 1,500,000,000; in Scotland, 40,000,000; total, about 1,540,000,000; yielding of duty about £450,000. The quantity made in Ireland is not known, as no duty was exigible in that part of the United Kingdom.

BRIGANTINE, or BRIG, a vessel with two masts, square rigged in the same manner as a ship; the spanker and spanker-boom being in the brig attached to the mainmast. [Ship.]

BRILL, a flat fish (Rhombus vulgaris), similar to turbot, but smaller and inferior in quality. It is plentiful on our southern coast, and is brought in abundance to the London market.

BRIMSTONE [Survey 1]

BRIMSTONE. [SULPHUR.] BRISTLES (Ger. Borsten.

to the London market.

BRIMSTONE. [SULHUR.]

BRISTLES (Ger. Borsten. Rus. Schtschetina), hard, strong, shining hairs, which form the manes of wild boars and hogs, and are imported from Russia and Prussia for the use of brushmakers, shoemakers, and saddlers. About 1,700,000 lbs. are annually entered for home-consumption.

BRITANNIA-METAL, a compound of tin, the regulus of antimony, copper, and brass, extensively employed in Sheffield and Birmingham, especially the former, in the manufacture of teapots, spoons, and a variety of other articles. All wares that were formerly made of pewter, and most of those now made of silver, or which are plated, are imitated in Britannia-metal. The articles made of it possess considerable beauty, and are very cheap; and when sufficiently massive, they are also very durable.

BROCADE, a fabric composed of satin, striped or purfled with gold or silver. It was at one time used for dress, but more lately for ornamental furniture. None has been manufactured in the United Kingdom for many years. The last is said to have been some very elegant pieces woven at Spitalfields, to be used as chair bottoms at Carlton House, for his Majesty King George IV.

BROKER, a person employed as an agent or middleman to transact business between merchants or other individuals. Brokers generally confine themselves to negotiations for the purchase and sale of some particular articles, by which means they acquire an intimate knowledge of their qualities, as well as an acquaintance with the sellers and buyers, and the state of supply and demand; and therefore generally finds it advantageous to affect his purchases and sales through A merchant seldom has the same intimate knowledge for his guidance, and therefore generally finds it advantageous to effect his purchases and sales through the medium of brokers. Brokers are, however, of different kinds, as, besides the ordinary commercial or produce brokers, there are ship-brokers, insurance-brokers, bill-brokers, and stock-brokers.

A commercial broker is a person who makes it his business to find purchasers for goods offered for sale, and vendors of goods wanted on purchase, thus becoming the medium through which transfers are accomplished. Brokers in London require, the medium through which transfers are accomplished. Brokers in London require, by 6 Anne, c. 16, to be admitted by the mayor and aldermen, who have a general superintendence over them, and are entitled to enforce certain regulations which they were empowered by that act to frame. By local act 57 Geo. III. c. 60, they must pay an admission fee of £5, and the sum of £5 annually; and are liable to a penalty of £100 for acting without being duly admitted. In England, a broker is agent for both parties, under the section of the statute of frauds (29 Ch. II. c. 3, § 17), which renders it necessary that in sales where the price exceeds £10, some writing should pass between the parties or their agents. The writing in this case is the bought-and-sold notes, which are notes of the bargain delivered by the broker, one to each party. "With respect to contracts made through a broker," says Mr Starkie, "itis now perfectly well settled that the bought-and-sold notes are, if they correspond, evidence to bind the bargain, although the broker has not signed a formal entry in his book, secus if they do not correspond. Although it be clear that an entry signed by the broker is not essential to the validity of a contract where formal bought-and-sold notes have been delivered, it is another question whether the broker's entry of the contract, signed by him, would be sufficient in the absence of sufficient bought-and-sold notes" (Law of Evidence, ii. 869, 870). Formerly the entry in the broker's book was held to be the contract, the bought-and-sold notes being merely transcripts of it, but the rule has latterly been to place dependence on the latter where they exist. "There is not," says Professor Bell, "in Soot-land any necessity, as by the practice of England, for a signed note to be entered in the broker's book" (Bell's Principles, § 89). Where the name of the purchaser has not been communicated, the seller may withdraw where the price is not for ready money, if he give speedy warning after inquiry into the condition of the purchaser. (Morton on Vendors and Purchasers, 76-78. Smith's Mercantile L. 411, 412. Starkie, ut supra. Bell's Com. i. 435, 436.) [Facroz. Lien.] Ship-brokers are persons who undertake the management of all business matters occurring between the owners of vessels and the shippers or consignees of the goods which they carry; such as procuring cargo or a charter for outward-bound ships, entering and clearing them at the custom-house, and collecting freight on the goods which they carry; such as procuring cargo or a charter for outward-bound ships, entering and clearing them at the custom-house, and collecting freight on the goods which they carry; such as procuring cargo or a charter for outward-bound ships, entering and clearing them

[INSURANCE. POLICY.]

For an account of the duties of bill-brokers and stock-brokers, see the heads

For an account of the duties of bill-brokers and stock-brokers, see the heads EXCHANGE and FUNDS respectively.

Persons who deal in old household furniture are also called brokers, though their occupation bears no analogy to that of any of the commercial agents above mentioned. In England, such persons frequently superadd to their business the appraising and distraining of goods, for the performance of which functions, however, they must provide themselves with an excise license, and conform to the regulations of the act 57 Geo. III. c. 93. The business of a pawnbroker is also different from those already noticed. [Pawnbroker]

BROKERAGE, the per centage charged by brokers for the sale or purchase of goods, bills of exchange, or stock. [Commission.]

BROMINE, a substance obtained by a chemical process from the uncrystallizable residue of sea-water, commonly called bittern. It is a liquid of a deep reddishbrown colour, and disagreeable suffocating odour. Sp. gr. 3. It is highly poisonous. Bromine was discovered by M. Balard of Montpellier in 1826. The alcoholic solution of bromine, and the bromide of sodium are employed in medicine. (Brande's Chemistry.)

Chemistry.)
BRONZE, an alloy consisting of from 8 to 12 parts of tin, with 100 of copper. is sometimes called gun-metal; and is used for casting statues, cannons, and other

BRONZE-POWDER. [Mosaic Gold.]

BROOM, a small, hardy, evergreen tree (Spartium scoparium), common in this country. The wood is used for pins, pulleys, and snuff-boxes; when of sufficient size it is also applicable to the same purposes as laburnum, which, except in colour, it closely resembles. The branches are used for thatching. The flowers of the species called dyer's broom (Genista tinctoria) yield a bright yellow colouring matter, which is used in dyeing wool.

Broom, a well known utensil, so called from having been originally made from

BROOM, a well known utensil, so called from naving been originally made from the twigs of the broom-tree.

BRUNSWICK, a German duchy, consisting of several detached portions of territory on the rivers Weser, Leine, Ocker, and Aller, between lat. 51° 38′ and 52° 59′ N., and long. 9° 10′ and 11° 22′ E., and is contiguous to Hanover and Prussia. Area, 1505 square miles; pop. (1839) 260,000. Circles: Brunswick, Wolfenbüttel, Helmstedt, Gandersheim, Holzminden, Blankenburg. Capital, Brunswick; pop. 35,000, chiefly Lutherans. Government, a constitutional monarchy, regulated by the national compact called the Landschaft's-Ordnung, of the 12th October 1832.

The northern districts, particularly Wolfenbüttel, have an undulating surface, and their soil is highly productive; the southern, including the Blankenburg territory, which lie within the

limits of the Hars, are composed of a succession of mountains, in part well wooded, and studded with highly cultivated valleys. The aspect of the whole of the duchy is indicative of good order and prosperity. The principal articles of home manufacture exported, are timber, yarn, linen, grain, oil, chicory, madder, leather, hops, and ironware, amounting to show £169,000 per annum. The chief imports are colonial produce, raw materials, fish, butter, cheese, and cattle. Having no coast, and, except the Weser, no navigable streams, the foreign trade of the duchy is naturally cramped; but a customs league exists with Oldenburg and Hanover, which opens to her the communication with the German Ocean by means of the Eibe and the Weser; and the transit trade between the Hanse Towns and the interior of Germany is a considerable source of smolument. Two fairs are held annually at the town of Brunswick; they begin on the Thursdays that fall nearest to Candlemas and St Lawrence's day, and each lasts about ten days.

Measures and Weights.—The ell of 2 feet = 22-46 Imp. inches. The wine ahm of 40 stub-gens = \$2-28 Imp. galls. The corn wispel of 4 scheffels or 40 himtens = 34-20 Imp. bushels. The centure of 114 lbs. = 117 lbs. 6 oz. avoird.; If the centure of 114 lbs. = 103 lbs. avoird.; If the centure of 124 lbs. = 103 lbs. avoird.; If the centure of 124 lbs. = 103 lbs. avoird.; If the centure of 124 lbs. = 103 lbs. avoird.

BRUSHES (Fr. Brosses. Ger. Bürsten. It. Setole, Spanzole. Por. Escovas. Rus. Schischetki. Sp. Bronas, Cepillos), cleansing instruments, generally made of bristles set in wood.

of bristles set in wood.

BUBBLE, a name familiarly applied to any chimerical or fraudulent commercial project carried on for the purpose of enriching the projectors at the expense of those who subscribe for shares. The mischief produced by the South Sea scheme and other gambling projects, in the years 1719 and 1720, led to the passing of the statute 6 Geo. I. c. 18, commonly known as the Bubble Act, prohibiting companies of this description tending to the prejudice of the public. The difficulties inseparable from the construction of this act (which never seems to have been observed) were removed in 1825 when it was represed by the statute 6 Geo. IV. 2. 91: and the projectors in 1825, when it was repealed by the statute 6 Geo. IV. c. 91; and the projectors of bubble companies are now punishable only when they can be deemed guilty of fraud at common law.

BUCHU, a low shrub (Diosma erenata) found at the Cape of Good Hope, the aromatic leaves of which, reputed to be powerfully antispasmodic, are an

the aromatic leaves of which, reputed to be powerfully antispasmodic, are an article of the materia medica.

BUCKBEAN, or Marsh-trefoil, a plant (Menyanthes) common in this country, the flowers of which are an article of the materia medica.

BUCKLE (Fr. Boucle. Ger. Schnalle). The buckle manufacture long ranked as one of the great staples of Birmingham, and its mutations through all the capricious and fantastic varieties of form and ornament which prevailed during the age of powder, embroidery, and gold lace, would furnish materials for an interesting work. The shoe-buckle having at length been completely supplanted by shoestrings, the manufacture lost all its importance. In 1791, his late Majesty George IV., then Prince of Wales, attempted, at the solicitation of the manufacturers, to revive the taste for buckles; but the tide of fashion set too strongly in the opposite direction to be controlled even by the example of royalty.

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BUCKRAM (Fr. Bougran. Ger. Schettre. It. Tela collata o gommata. Por. Olandilha. Sp. Bucaran), a coarse kind of linen or cotton fabric, having a peculiar stiffness imparted to it by strong gum and calendering, and chiefly used in the making of clothes to keep them in the proper shape. Buckrams are ½ wide; when formed of cotton they are generally in pieces of 28 yards in length; when of linen, 25 yards. (Perkins on Haberdashery.)

BUCKWHEAT, on BRANK (Fr. Bit Sarrassin. Ger. Buchweisen. It. Grano Saraceno. Por. & Sp. Trigo Saracino), an annual plant (Polygonum Jagopyrum), a native of a warm climate, which grows with a strong branching stem of a reddish colour, about 2 feet high, and the seeds of which, when ground, produce a fine farina which in appearance resembles that of wheat. Its oultivation has never been very extensive in the variable climate of Britain. In England a little of it is cultivated in Norfolk, Suffolk, and some other counties, on light and poor soils; in other parts it is ploughed down as a manure while in flower. In Scotland it is cultivated in Norfolk, Suffolk, and some other counties, on light and poor soils; in other parts it is ploughed down as a manure while in flower. In Scotland it is seldom cultivated except for feeding pheasants and other game. "On the Continent it is used in the distillery, and its flour made into bread, which is palatable and nutritious. In France it is given to horses, and it is said that a bushel of its grain goes farther than 2 bushels of oats; and, if mixed with four times its bulk in bran, will be full feeding to any horse for a week. Its straw is said to be more nourishing than that of clover, and its blossoms form a rich repast for bees. The produce may be reckoned about 4 qrs. per Imp. acre" (Lawson's Agriculturist's Manual). The quantity annually imported is of trifling amount.

BUDGET, a name applied to the annual statement of the public revenue and

BUE 116 BUE

expenditure submitted by the Chancellor of the Exchequer to the House of Commons. expenditure submitted by the Chancellor of the Exchequer to the House of Commons. The accounts which accompany the statement show on the one hand the sums required for the public service during the year, under the heads of Navy, Army, Ordnance, and Miscellaneous Services, together with any incidental charges; and on the other hand are given the Ways and Means for meeting the same, consisting of the surplus (if any) of the Consolidated Fund, the annual duties, and such incidental receipts as come in aid of the national revenues. These accounts are, however, defective, and not readily understood, as the interest of the national debt and other permanent charges are not included, and nothing is stated regarding the produce of the permanent taxes, which form the consolidated fund, except the amount of its surplus or deficiency, after providing for the permanent charge upon it.

the permanent taxes, which form the consolidated fund, except the amount of its surplus or deficiency, after providing for the permanent charge upon it.

BUENOS AYRES, ARGENTINE REPUBLIC, or States of the Rio de la Plata, a South American confederation, whose territories embraced the vast country lying between lat. 22° and 41° S., and long. 57° and 70° W., formerly part of the Spanish viceroyalty of Buenos Ayres. Area, 910,000 square miles; pop. 700,000, chiefly Indians and mixed races. The confederated states were Buenos Ayres, Entre-Rios, Corrientes, Santa Fé, Cordova, Santiago, Tucuman, Salta, Catamarca, Rioja, San Juan, San Luis, Mendoza, with capitals of the same name, excepting Entre-Rios, of which the chief town is Baxada. This confederacy was dissolved some years ago by civil disputes, and the country remains in a divided condition. Buenos Ayres being the leading, and the only maritime state, its acts are often considered abroad as those of the whole country.

was dissolved some years ago by civil disputes, and the country remains in a divided condition. Buenos Ayres being the leading, and the only maritime state, its acts are often considered abroad as those of the whole country.

The chain of the Ander runs along the whole western boundary, and the country for several hundred miles to the east of this chain is generally mountainous. The territory E. of the river Parana is waving, well-watered, and fertile; but the district between that river and the mountains, and extending from N. to B. through the whole length of the country, consists of extensive plains. In the N. these plains are in many parts liable to be overflowed; in the B. they are called powpar, and are remarkably dry and destitute of trees. Mines of the precious related to the states adjoining the Andes, particularly from Mendoza northwards; and the extensive districts between the Paragnay and the mountains abound in salt. The country is however chiefly celebrated for the countless herds of wild exist and horse which roam in the vast statural pastures grounds in the vicinity of the tori sale way go present of the country is country in the country is conducted entirely at the town of Buenos Ayres, which is the outlet for the produce not only of the whole valley of the river Plata, but also of large districts of Peru and Chill. It is a fine healthy two, situated in lat. 34° 3° 8, long. 8° 8° 8, long. 8°

The Plata is navigable for ships to Assumption, the capital of Paraguay, about 1000 miles from its mouth; and for small craft to the 18th degree of south latitude. From Paragnay immense quantities of gerow and are brought to Buenos Ayres packed in hidde, and distributed throughout Chili and Peru. These countries are besides partly supplied by Buenos Ayres with European

Measures and Weights same as Spain.

Money.—The integer of account is the current oddlar, which is divided into 8 reals, each of 16 quartos, or 34 marwedis. The circulating mention is principally composed of government paper money, which, by its overissue, has depreciated the value of the current dollar to about 3d. sterling. Some copper money is also in deculation. The silver dollar coined by the Argentiane Republic was of the same weight and finences as the Spanish hard dollar.

Financez.—These are in a deplorable condition lowing to the late hostilities with Brazil and France. In 1836, the revenue was estimated at \$12,000,000 currency, which was quite insufficient to meet the ordinary expenditure of the state. The amount of funded debt unredeemed (6)

The Plata was discovered by Juan Diaz de Solis, a Spaniard, in 1512; and in 1534 the country was conquered by Mendoza, who founded the city of Buenos Ayres. In 1778, the province of Buenos Ayres, which had hitherto been a dependency of the Spanish viceroyalty of Peru, was formed into a separate viceroyalty, which included the present States of Bolivis, Paraguay, Uruguay, and the Argentine Republic. In 1816, the states of the Argentine Republic declared their independence of Spain. Several revolutions have since taken place; and from March 1838 to October 1840 Buenos Ayres was blockaded by the French.

BUFF, a kind of leather generally prepared by dressing buffalo-skin with oil, after the manner of shammy. It is also made from the skins of other animals. BUGLES, a species of glass beads, formed into small capillary pipes, broken into various lengths. They are imported in large quantities from the Levant. Duty is paid on about 40,000 lbs. annually, and a considerable quantity is likewise reexported to Africa and Asia

BUILDING SOCIETIES. [FRIENDLY SOCIETIES.]

BULLION, a term strictly applicable only to gold and silver in an uncoined state, but of late used commonly to denote the precious metals in general. No commodities being so permanent in their value, so uniform in their quality, and so easy of transport as gold and silver, these metals, besides their extensive use in the arts, have been employed from a very early age in the form of coin, as a measure of the value of other commodities; and their employment for this purpose is at present nearly universal.

is at present nearly universal.

The precious metals were in ancient times derived from a great variety of sources, but since the discovery of America they have been obtained principally from the Central and Southern part of that continent. According to Humboldt, the average annual supply procured thence from 1492 to 1500 was £52,083; from 1500 to 1545, £625,000; from 1545 to 1600, £2,291,666; from 1600 to 1700, £3,333,333; from 1700 to 1750, £4,687,500; from 1750 to 1803, £7,354,166; and at the commencement of the present century, £9,062,500.

The revolutionary tumults in the Spanish American colonies in 1810 led to so great a dilapidation of the mines, that their produce was lessened by one-half; the average annual supply from 1810 to 1830, according to Mr Jacob, being only £4,036,838. In 1825, a number of joint-stock companies were formed in Britain for the purpose of working the mines; but their of crations were conducted with so

the purpose of working the mines; but their o crations were conducted with so little skill that for several years no observable in rease took place on the annual supply of the precious metals; and though the case is now somewhat different, yet the prospect of the South American mines being rendered equally productive as before, is distant and uncertain.

Of late years new sources of supply as regards gold have been discovered in the United States and Russia. In the former gold was discovered in North Carolina in 1804, and afterwards in Georgia and other states; but the produce realized was triling until 1830, when about £97,083 were minted, exclusive of an equal amount supposed to have been consumed or exported in an uncounted state. The produce has since been considerably increased; but well-informed persons are opposed to the opinion that any permanently extensive supply can ever be derived from that quarter. In Russia the case is different. The gold mines of that country, situated in the Uralian Mountains, yielded, in 1820, 1938 lbs. avoird.; and their produce has since progressively increased. In 1835 it amounted to 10,620 lbs., value £645,165; and most accounts concur in representing the supply as likely to prove lasting as well as abundant. At present the total annual produce of America, Europe, and Asia may be estimated as follows:—

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Country.	Principal I	Gold.	Silver.	Total.	
	Gold.	Bilver.	£	£	£
Mexico		Real del Monte			2,400,000
	Costa-Rica	Honduras	15,000		
Colombia	Choco	Momarto	375,000		
Peru	Pataz, Huallas	Pasco	30,000	950,000	980.000
Bolivia	Tipuani River	Potosi	40,000	400,000	440,000
	Petorca	Copiapo	900,000	300,000	500,000
Brasil	Congo Soco		200,000		200,000
	_		960,000	4,008,000	4,968,000
United States	N. Carolina, Georgia	1	150,000		150,000
	Transylvania, &c	Hungary, &c	140,000	450,000	590,000
	Ural Mountains	Altal	650,000	170,000	820,000
	•		1,900,000	4,638,000	6,528,000
Rest of Asia	Borneo, China	China	1,235,090	915,000	2,150,000
		Total,	3,135,000	5,543,000	8,678,000

No notice is taken of Africa, as the former reports of its produce appear to have been grossly exaggerated; and it may now be well doubted whether the supply derived from that part of the world is more than equal to the consumption. The estimates for Mexico, Peru, Bolivia, Chili, United States, and Asiatic Russia, are founded on returns by the British consuls in those countries,—allowance being made for the quantities raised in Peru and Chili, and exported clandestinely. nor the quantities raised in Feru and Chill, and exported clandestinely. The estimates for the other countries are chiefly founded on statements made by Mr Jacob and Mr John Crawfurd. So much uncertainty, however, attends all calculations of this kind, that the preceding summary, and more especially the part which has reference to the portion of Asia not subject to Russia, is to be regarded merely as locate approximation. a loose approximation.

a loose approximation.

Yague as are all estimates regarding the production of the precious metals, those regarding their consumption are much more so, there being no data upon which to found any calculation of the proportions used for coin and in the arts, or of the supply obtained for these purposes by the fusion of old plate. Humboldt estimated the quantity of gold and silver annually consumed in Europe, exclusive of that used for coin, at £3,500,000. Mr Jacob's estimate, in 1830, of the amount applied to ornamental and luxurious purposes, was as follows:—Great Britain, £2,457,220; France, £1,200,000; Switzerland, £350,000; rest of Europe, £1,605,490, America, £380,630; total of Europe and America, £5,893,340; or, after deducting 1-40th for that supplied by the fusion of old plate, to £5,746,006. Adding 1-5th of this for Asia will make the total consumption of Europe, America, and Asia, exclusive of that used for coin, £6,895,207. that used for coin, £6,895,207.

The quantity required to serve as coin depends upon a great variety of circumstances,—such as the wealth and population of the different countries of the world, the extent to which their currency has been economized by the use of paper-money, and by the art of banking, the waste of coins by abrasion, and their loss by accident, and by the practice, common in uncivilized countries, of burying treasure. Of these the most important as regards the consumption of the precious metals is the loss by abrasion. According to recent experiments at the mint, this appears to be upon British silver coin about 5s, and upon gold 1s, 3d, per cent. per annum; but on the general amount of coin throughout the world it cannot be reckoned at less than 5s, per cent. upon both,—the foreign silver-money being about four times that of gold in amount, and inferior in fineness to British silver. The whole amount of the precious metals in the world is estimated by Mr Senior at two thousand millions sterling. No estimate has been formed of the amount existing in the form of coin; but the annual loss by abrasion and otherwise can scarcely be assumed at less than £2,000,000. This, added to the amount used for other purposes, would raise the total annual consumption of gold and silver to £8,395,215, a sum nearly equal to the annual consumption for other purposes than coin is by many supposed to be greatly exaggerated: his allowance of only 1-40th for the fusion of old plate is also considered to be much too small.

The value of gold and silver, like that of all other commodities, is regulated by and by the art of banking, the waste of coins by abrasion, and their loss by acci

The value of gold and silver, like that of all other commodities, is regulated by the amount of capital and labour required to bring them to market,—in other

words, by their cost of production. If this could be reduced, their value would fall, and the money value of other commodities would proportionally rise: if, on the other hand, their cost of production were to be augmented, their value would be increased, and the money value of other commodities would proportionally fall. be increased, and the money value of other commodities would proportionally fall. Any fluctuation, therefore, on the value of gold or of silver, according as the one or the other has been adopted as the standard, is necessarily productive of a corresponding variation in bullion prices, and a proportionate derangement of all existing contracts. The influence of a reduced cost in obtaining the precious metals upon bullion prices, has been experienced since the discovery of America, where the mines have yielded those metals with so much less labour than the mines previously worked in the Old World, that gold and silver have fallen to one-third of their former value, and bullion prices have been reject to there times their former. violety worked in the old work, this gold and short have lasted to the state to the state of the

The natural tendency of the defalcation in the produce of the Spanish American mines after 1810 was to reduce bullion prices; and by many persons the remarkable fall, which occurred in Europe after the close of the war, is in part attributed to this circumstance. It would appear, however, that this decline can be accounted for by increased facility of production, or by other causes affecting each particular commodity; "that no direct influence of the defalcation of the produce of the mines is to be traced in the late fall of prices; and that consequently the presumption must be, either that the mass of the metals is so large as to render what might otherwise appear to be considerable variations of supply, imperceptible in general prices, or that circumstances affecting their functions and distribution have counterbalanced these variations" (Tooke on Prices). Of the latter, perhaps the most important were the immense quantities of plate and hoarded treasure exported terbalanced these variations" (Tooke on Prices). Of the latter, perhaps the most important were the immense quantities of plate and hoarded treasure exported from South America to Europe by the loyalists and others during the civil dissensions, and the cessation of the drain of silver from Europe to China and India, and an inversion of the stream by an importation which is still taking place. It must be admitted, however, that, all other circumstances being the same, if the produce of the mines had not fallen off, prices would now be higher in some proportion to the latter supply of the metals. proportion to the larger supply of the metals.

Gold and silver are subject to fluctuation in their relative value towards each

Gold and silver are subject to fluctuation in their relative value towards each other as well as to other commodities. More labour and capital have always been requisite to bring a given quantity of gold to market than the same quantity of silver, and the value of the former has in consequence been always much greater than that of the latter; but the proportion in which gold has exceeded silver in value has varied at different times. Among the Romans gold to silver seldom varied more than from nine to eleven for one; nor did the relative value of the metals fluctuate more down to the time when the Spanish American mines were brought into full activity. Since that period the comparative value of the two kinds of metal has been gradually changed, and gold is now become rather more than 15½ times as valuable as silver.

Gold is the standard of value in this country, and it is regularly purchased by the Bank of England at the rate of £3:17:9, and issued at the rate of £3:17:10½ per ounce of 22 carats (11-12ths) fine; its price may therefore be regarded as fixed. Silver, however, though the standard of value in most foreign countries, is here used merely as a subsidiary currency, and its price is therefore regulated by the state of the exchange. For some years past it has varied little from 5s. per ounce of the fineness of 11 oz. 2 dwts. (37-40ths). Gold bullion occurs chiefly in the form of bars or doubloons, silver bullion in that of bars or dollars. The bullion trade of the United Kingdom is almost wholly confined to the Bank of England and a few private merchants in London. private merchants in London.

Bullion is chiefly imported by the government packets and ships of war, the charges attending which are detailed in the Navy List.

The exportation and importation of bullion in this country is free; and by 3 & 4 Wm. IV. c. 52, § 2, it may be landed without report entry or warrant.

BULRUSH, a plant (Scirpus lacustris) much used for putting between the staves of barrels, and for chair-bettoms and matting. It is imported from Russia and Holland; but it might be profitably grown in marshes in this country where the soil is not very peaty, and of rather superior quality; particularly on the banks of rivers which are flooded by fresh water tides.

A load of bulrushes consists of 63 bundles.

BUOYS (Fr. Bouces. Ger. Ankerboyen. It. Gavitelli. Sp. Boyas) are floating

pieces of wood or cork moored to some certain spot, in order to point out the course that a vessel should follow; they are also used to mark the situation of ships' anchors,—the former being denominated public, the latter private buoys. The public buoys on the English coasts are under the control and management of the Trinity House, Deptford-Strond; and those of Scotland and Ireland are under its supervision (6 & 7 Wm. IV. c. 79). Small tonnage duties are charged on the shipping for the maintenance and repair of the public buoys. [Lighthouse.]

"Every person who shall ride by, make fast to, or remove, or wifully run down, or run foul, of any vessel placed to exhibit lights, or any buoy or beacon, belonging to, or placed by, any corporation, or society, having lawful authority to place the same, shall, besides being liable to the expense of replacing or making good any damage occasioned thereby, forfeit for every such offence any sum not exceeding £50, nor less than £10." (6 Sec. IV. c. 128.)

Private buoys are protected by the act 1 & 2 & 9 Geo. IV. c. 75.

BURDOCK, or CLIT-BUR, a biennial indigenous plant, common in uncultivated places, the roots of which being esteemed aperient, diuretic, and sudorific, are used in medicine. The roots are collected in spring, and lose four-fifths of their weight by drying.

BURGUNDY PITCH, the resin of the spruce fir (*Pinus abies*), is usually in softish masses of an aromatic odour, and a pale yellowish brown colour, often intermixed with white streaks, and occasionally in rounded masses, or tears, which have spontaneously exuded from and dried upon the trees. This resin is likewise obtained by incision of the bark: the different portions, being collected, are dissolved

have spontaneously exuded from and dried upon the trees. This resin is likewise obtained by incision of the bark; the different portions, being collected, are dissolved in boiling water, and cleansed by pressing through canvass cloths. Burgundy pitch is imported from Saxony and the north of Europe. Its only use is as an ingredient in some plasters. Price in bond, 18s. to 25s. per cwt.

**Common or spurious Burgundy pitch manufactured in this country is detected chiefly by deficiency in the peculiar odour and viscidity of the genuine resin.

BUSHEL, a British measure of capacity used for seeds, corn, and other dry goods; it is equivalent to 4 pecks, 8 gallons, or to one-eighth of a quarter. The Imp. bushel measures 2218 192 cubic inches, or 36 348 French litres; and the Winchester, or old English standard corn bushel (still employed in the United States and elsewhere), measures 2150 42 cubic inches, or 35 237 litres; hence 33 Winchester bushels equal 32 Imperial nearly. The bushel, heaped measure, formerly used for coals, lime, fish, potatoes, and other commodities, contained 2217 6 cubic inches; but when heaped in the form of a cone above the brim, 2815 3.

Bestdes the Winchester bushel, a variety of other bushels were in use in different parts of English.

Besides the Winchester bushel, a variety of other bushels were in use in different parts of England for corn; these differed greatly in size; thus, the Herefordshire bushel contained 10 gallons, the Berkshire bushel 9 gallons, and the Cornwall bushel 24 gallons. In some parts of the north of England, 6 bushels were termed a boll; in others, this denomination was applied to a smaller number of bushels. A detailed account of all these local measures will be found in the Second Report of the Parliamentary Commissioners on Weights and Measures.

BUSS, a cutter-built vessel, in size varying from 50 to 80 tons, employed in the Scotch and Dutch herring fishery.

BUTT, a liquid measure in the old English system. The ale or beer butt contained 108 ale gallons; the wine butt 126 wine gallons. The standard gauge of

ained 108 ale gallons; the wine but 126 wine gallons. The standard gauge of the butt of sherry is now 108 Imp. galls.

BUTTER (Dan. Smör. Du. Boter. Fr. Beurre. Ger. Butter. It. Burro. Por. Manteiga. Sp. Manteca), a substance derived from the oily or creamy part of milk by agitation or churning. It may be obtained either by separating the cream from the milk and then churning it, or by churning the milk and cream together. By the first method the best butter is obtained, by the second the largest quantity. The quality also depends materially on the care with which it is made, and on the nature of the pasture; the best is made from cows fed on rich natural meadows. Butter is extensively made and consumed both in a fresh and salted state in almost all the countries of northern Europe; and in the East it is largely used in the liquid form, called GHEE. The butter of Holland is accounted the best, a pre-eminence which it owes chiefly to the remarkable attention paid by the Dutch to the minutize of the dairy, to the purity of the salt used, and especially to cleanliness. The English butter is scarcely inferior, especially that of Epping, Cambridgeshire, Suffolk, Yorkshire, Somerset, Gloucestershire, and Oxfordshire. The best Scottish is that of Clydesdale and Aberdeenshire. The butter produced in Britain is however insufficient for the consumption, and large quantities are imported, particularly from Ireland, where it forms a staple. imported, particularly from Ireland, where it forms a staple.

The principal dairy counties of Ireland are Carlow, Cork, Fermanagh, Kerry, Leitrim, Longford, Silgo, Waterford, and Westmeath. "Carlow has the reputation of producing the best butter; but the firkins containing that which is manufactured in all the surrounding counties are

often branded with the name of Carlow. It is highly esteemed in London, and is often sold for Cambridge butter; but much of the Irish butter is very salt, and sometimes amoky and tailowy. In fact, there are three distinct sorts of butter in the Irish market. The best is sent to Dublin and to England; and from the latter country exported to the East and West Indies. An inferior sort finds a market in Spain; and an inferior still used to be sent to Boulogne" (Youatt on Cattle, p. 189). Brazil now takes annually about 30,000 firkins Irish butter.

The quantity imported into Britain from Irisland was, in 1826, 428,670 cwts. In 1847, 12,000 tons of fresh butter were received at London, and 11,500 tons at Liverpool. In 1850, 13,000 tons came to London, and 12,600 tons to Liverpool. The exports, about 5609 tons, go chiefly to Anstralis, Brazil, Portugal, and the West Indies.

All the butter exported from the United Kingdom is the produce of Ireland; all the butter produced in England being consumed at home. The quantity of butter consumed in London is estimated by Mi Culloch at 18,357 tons annually, of which 2000 tons are supplied to shipping. The imports of foreign butter were in 1840, 252,661 cwts.; in 1852, 354,152 cwts, of which 344,185 cwts. were entered for home consumption. The gross amount of duty received in 1852 was £167,418. By the tariff of 1841 the duty on foreign butter was 10a per cwt., and 5a, 3d. per cwt. If imported from a British possession. These duties were reduced by the tariff of 1845 on foreign butter to 5s. per cwt. or if from a British possession to 2s. 6d.

BUTTER-NUTS are the berries of a large tree (Carpocar tomentosum) which

BUTTER-NUTS are the berries of a large tree (Caryocar tomentosum) which grows in Guiana, and is called by the natives Tata-Youba. They are covered by a skin two or three lines thick, and consist internally of a buttery yellowish substance, which melts between the fingers, and is sometimes used in cooking instead of common butter. Under the skin lies a stone, within which is a brownish kidney-shaped kernel, very good to eat, and commonly served at table. Butternuts are common in the London markets.

BUTTONS (Fr. Boutons. Ger. Knöpfe. It. Bottoni. Por. Botoens. Sp. Botones). This article is made of an endless variety of materials. In former times it was also made of an endless variety of shapes; but at present these may be reduced to four, viz. buttons with shanks; buttons without shanks; buttons on rings or wire moulds; and buttons covered with cloth or other material. Metal buttons are moulds; and buttons covered with cloth or other material. Metal buttons are manufactured on a large scale at Birmingham, both for home consumption and exportation. Except where the taste of foreign countries demands otherwise, these are at present generally made with a well gilt and highly ornamented surface. In the reign of George I. several absurd acts were passed to regulate the kind of buttons to be worn; but these, though still on the statute-book, have been long in disuse. The act 36 Geo. III. c. 6, imposes penalties on the manufacture or sale of buttons marked "gilt" or "plated," and not so gilt or plated in terms of the act. terms of the act.

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CABBAGE, a well-known culinary vegetable (Brassica oleracea), of which there are almost innumerable varieties. Those most valued for the garden are generally divided into the close-hearting and the spreading; the most common of the former being the York and the Savoys, and of the latter coleworts and Scotch kale. The larger and grosser kinds are sometimes cultivated as food for stock. According to Arthur Young, the average crop on a dry soil is 36 tons per acre; but on a sandy soil, only 18 tons. In Germany, immense quantities of the large white cabbage are manufactured into "that excellent preparation" sauer kraut, an article of considerable trade in that country. an article of considerable trade in that country.

CABBAGE-WOOD is obtained from the cabbage-palm (Areca oleracea), a tree

which grows in abundance in the mountainous parts of the West Indies, and is familiar to all who have read the popular tale of Paul and Virginia. The wood is

familiar to all who have read the popular tale of Paul and Virginis. The wood is sometimes used in ornamental furniture; but it does not answer very well, as the ends of the fibres are too hard, and the medullary part too soft for holding glue; the surface is also very difficult to polish, and cannot be preserved without varnish. The trunk, after the centre part is rotted out, forms a durable water-pipe. CABLE, a long thick rope, employed in the mooring or anchoring of ships. There are generally at least three kept ready for service, namely, the sheet cable, the best bower cable, and the small bower cable, which are each commonly 100 or 120 fathoms in length. Cables are now also formed of iron chains, which are much stronger and more durable than those of hemp. On a rocky bottom, a hempen cable is destroyed in a very short time, while the duration of the other is almost

indefinite. It is sometimes desirable to cut the cable when of hemp; this contingency is provided for in iron cables by a bolt and shackle at short distances, so that by striking out the bolt the cable is easily detached. At present, hempen cables are in very little request in the British navy, and even in the merchant service iron has nearly supplanted hemp for this purpose. The regulations of Lloyd's require all vessels under 150 tons to have at least 150 fathoms of chain; of 150 and and a 250 tons 180 do 16 250 and under 250 tons 180 do 16 250 and under 250 and under 250 do 16 250 and under 250 and require all vessels under 100 tools to have at least 100 fathoms of chain; of 150 and under 250 tools, 180 do.; of 250 and under 350 tools, 200 do.; of 350 and under 500 tools, 240 do.; of 500 and under 700 tools, 270 do.; of 700 tools and upwards, 300 do.; but in all cases where hempen cables are used, then one-sixth more in length is required. [CORDAGE.]

required. [CORDAGE.]

Cable s-tength in navigation signifies 120 fathoms, the usual length of a cable.

CACAO, OR COCOA (Fr. Sp. Por. & It. Cacao. Ger. Kakao), is the bruised

CACAO, OR COCOA (Fr. Sp. Por. & It. Cacao. The seeds are seeds or nuts of the cacao or chocolate tree (Theobroma cacao). seeds or nuts of the cacao or chocolate tree (Theoroms cacao). The seeds are oval, about as large as an olive, and covered with a violet or ash-gray skin which encloses two cotyledons of a fatty nature, and of a brownish-black or violet colour. When simply bruised they constitute the cacao of the shops; reduced to a paste, mixed with sugar, and flavoured with vanilla, they become chocolate. They are imported from the West Indies, Venezuela, Ecuador, and Brazil, in all which places the tree grows wild, or is cultivated for the sake of its seeds. Dr Ainslie states that the cacao is now also much cultivated in the Philipping islands and that the that the cacao is now also much cultivated in the Philippine islands, and that the chocolate made from the nuts, particularly in Zebu, is esteemed even superior to that of Guayaquii in America. Cacao is considered somewhat less nutritive, but much lighter than chocolate. The quantity consumed in the United Kingdom has greatly increased since 1832, when the duty was reduced from 6d. to 2d. per lb. It now increased since 1832, when the duty was reduced from 6d. to 2d. per lb. is 1d. From 3,000,000 to 4,000,000 lbs. are annually imported; of which about

16. From 3,000,000 lbs. are entered for home consumption; the remainder being re-exported chiefly to Germany, Holland, Belgium, Spain, and Italy. S

CADMIUM, a rare metal discovered in 1817, by Stromeyer, in an oxide of xinc (Annals of Philosophy, vol. xiv.). In colour and lustre it has a strong resemblance to tin, but is somewhat harder and more tenacious. It is very ductile and malleable. Sp. gr. 8.604. The sulphuret of cadmium has an orange-yellow colour, and would form a useful pigment, could the metal be found in greater abundance.

CAFFISO, an Italian oil measure, equal in Malta to 4§ Imp. gallons, and in Messina and Trieste to 2§ Imp. gallons.

CAHIZ, a Spanish corn measure, equivalent in Alicant to 63, in Aragon to 5, and in Valencia to 53 Imp. bushels; but the standard Avila cahiz of 12 fanegas, used in Cadiz and other places, is equal to 183 Imp. bushels.

CAIRNGORM, a name given by lapidaries to an ornamental stone found on the mountain of that name in Inverness-shire. It is a splendid quartz, of various

the mountain of that name in Inverness-shire. It is a splendid quartz, of various shades and nearly transparent.

CAJEPUT OIL, a valuable volatile oil, limpid, transparent, of a greenish colour, a camphoraceous smell, and an acridly aromatic taste. Sp. gr. 0.927. It is sometimes adulterated with other oils, particularly oil of turpentine. It is prepared in large quantities in the Dutch settlements on the Banda and Molucca islands, from the leaves of the Melaleuca cajeputi, and is imported into this country, by way of Holland, in copper flasks. It is used internally as a stimulant and antispasmodic, but more frequently externally as an embrocation.

CALABASH (Sp. Calabaça), a name given in the West Indies to a gourd or pompion, the fruit of the Crescentia cujete, the shells of which are used by the natives for cups, measures, kettles, and other vessels.

CALAMANCO, a woollen fabric, chiefly manufactured in the Netherlands. It is made plain, coloured, striped, or watered; and the warp is sometimes mixed with silk or goats' hair.

is made plain, coloured, striped, or watered; and the warp is sometimes mixed with silk or goats' hair.

CALAMANDER WOOD, a beautiful fancy wood obtained from a tree which grows in Ceylon. It is extremely hard, and finely veined with different shades of black and brown. Being scarce and very dear, little is imported.

CALAMINE, a native carbonate of Zinc.

CALCEDONY, an ornamental stone, a species of agate of a uniform colour, generally of a milky white or pale yellow, like turbid jelly, often with an internal wavy structure in the form of stalactites, and very commonly with a peculiar mammillary surface. It is found in abundance in the Farce islands, in Iceland, in Cornwall, and many places of Britain as well as other countries; sometimes in large masses from which cups and other vessels are formed.

CALCIUM, the metallic base of Lime.

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CALENDAR. [Measures and Divisions of Time.]

CALICO (Fr. Coton. Ger. Kattun. It. Tela Bambagina. Por. Pano de Algodao. Sp. Tela de Algodao), white, or plain cotton cloth. [Cotton Manufacture.]

CALOMEL, the protochloride of Mercury.

CALUMBO ROOT (Fr. Racine de Calumbo. Por. Raix de Calumba. Ger. Kolumba wurzel. Mozamb. Kalumb). The calumbo plant (Cocculus palmatus) is produced in Malabar, and in the thick forests on the eastern coast of Africa, between Oibo and Mozambo, from which last place the roots form a staple export to Ceylon, and thence to Europe. Calumbo root is generally brought in transverse sections, from half an inch to three inches diameter, rarely divided across; and the bark is of a dark brown colour outside, and bright yellow within. It is very subject to decay by worms; when good it looks bright and solid, breaks with a starchy fracture, and has a faint aromatic odour, and bitter tasts.

The root of a Carolina plant (Frasera waltera) is imported into Liverpool, and sometimes fraudulently substituted for Calumbo. The American root may be distinguished by its whiter colour, lighter texture, the mixture of longitudinal pieces, and the taste being at first sweetish, and not nearly so bitter as the genuine root. The substance of the tree is besides rendered blue by iodine, the false, brown. Calumbo root is used in medicine. (Ainsièr's Mat. Indica. Duncan's Dispensatory.).

CAMBRIC (Fr. Batists. Ger. Kammertuch. It. Combragia. Por. Cambraia. Sp. Cambrai), a very fine linen fabric, so called from having been originally manufactured at Cambray, a city in the department Du Nord in France.

CAMEL (Arab. Djemai), a ruminating quadruped, of a grotesque form, which has been used from a remote period in eastern countries as the principal beast of burden. There are two species: The Bactrian came! (Camelus Bactrianus), characterized by a couple of humps—one on the rump, and another above the shoulders, is employed in Thibet, Turkistan, Tartary, Southern Russia, and in the Pisan territory in Tusca The camel is esteemed by eastern nations one of the most precious gifts of Providence to man; and assuredly, it seems formed by nature for a life of patient drudgery. Justly has the Arab named it the Living Ship of the Desert, as without it he could neither transport himself nor his merchandise across those oceans of sand be could neither transport himself nor his merchandise across those oceans of sand with which his country is covered. Its spreading cushioned feet, formed to tread lightly upon the dry and shifting soil—the nostrils so formed that it can close them at will to exclude the drift sand of the parching simoom—the powerful upper teeth for assisting in the division of the tough prickly shrubs and dry stunted herbage of the desert—and above all, the cellular structure of the stomach, which is capable of being converted into an assemblage of watertanks,—bear ample testimony to the care manifested in the structure of this extraordinary quadruped. The camel is weaned at the commencement of the second year, and begins to propagate when four years old, though it does not complete its full growth until the age of twelve. It will live as long as forty years; but after twenty-five or thirty its activity begins to fail. Camels are content with the coarsest food—a bunch of dry grass or the stunted shrube of the wilderness. Their ordinary food is a ball of paste (maabouk), weighing about a pound, made of barley meal and water, which each receives in the evening; and this is all the daily expense of these useful creatures. The value of the camel depends of course on its kind and quality. In Hejaz, Burckhardt states the price of a good one to be £14, but they sometimes cost £35; and as much as £70 has been paid for one of the Oman breed.

Camels are used both for riding and carriage, for which purposes they are employed in large numbers in the property of the carriage, for which purposes they are employed in large numbers in the remains and the property of the carriage, for which purposes they are employed in large numbers in the property of the carriage, for which purposes they are employed in large numbers in the property of the carriage, for which purposes they are employed in large numbers in the property of the carriage.

Camels are used both for riding and carriage, for which purposes they are employed in large numbers in the Eastern caravans. [Caravan.] The first thing that an Arab examines about his camel, when preparing for a long journey, is the hump, which is an infallible criterion as to the ability for exertion; for whenever it subsides the beast gradually yields to fatigue. A long journey will cause the hump almost entirely to disappear: it is easily restored, however, by a few weeks of good nour-ishment and repose. The favourite pace of the riding camel is a kind of amble at the rate of 5 or 5 miles an hour. Many fabulous stories are related of the swiftness of this animal, but it never approaches even for short distances to that of a common horse, though it is perhaps unrivalled for the ease with which it will despatch an uninterrupted journey of several days and nights if allowed its own natural pace, and not employed on hilly, woody, or slippery ground. The load of the carriage camel in common cases is from 400 to 500 lbs. for a short journey, and from 800 to 400 lbs. for one of any considerable distance. The capability of bearing thirst varies among the different races. In the caravans from Darfur they travel nine or ten days without water; but the Anatolian camel requires drink

travel nine or ten days without water; but the Anatolian camel requires drink every second day.

CAMEL-HAIR (Fr. Poil de chameau. Ger. Kameelhaar. It. Pelo di camello), is imported into the United Kingdom from the Levant, principally for the manufacture of pencils for the painter. That produced in Persia is held in the highest estimation. The black hair is most valued, next the red, and the gray brings only half the price of the red. In the East camel-hair is woven into clothing and even tents, purposes to which it has been applied from a remote period.

CAMLET (Fr. Camelot. Ger. Kamelot. It. Ciambello) was originally a rough fabric made of the hair of the camel and the goat interwoven, which was used by ascetics. That of the East is made of the hair of the Angora goat. English camlet, however, is a light stuff made of long wool hard spun, sometimes mixed in the loom with cotton or linen yarn.

mixed in the loom with cotton or linen yarn.

CAMPHOR (Du. Kamfer. Fr. Canfre. Ger. Kampfer. It. & Por. Canfora.

Sp. Canfor. Arab. & Pers. Kafoor), a peculiar vegetable principle arising from the separation of the volatile oil of different trees, which is used in medicine and

the arts. Two kinds are distinguished in commerce:

the arts. Iwo kinds are distinguished in commerce:—

China or Java Camphor, the only kind met with in Europe, is the product of
the Laurus camphors (Nees Von Esembeck), found in Quang-tung and Fokien in China, in Cochin China, and in Japan. It is extracted from all parts of the
tree, but chiefly from the roots, and is obtained in the state called orude camphor
merely by sublimation. In this state it is generally imported, and is afterwards
refined by mixture with lime and a second sublimation. Crude camphor is a
very white soft semitranguagent substance, having a crystelling approach to in small brownish or gray grains mixed with impurities. Refined camphor is a very white, soft, semitransparent substance, having a crystalline appearance, a strong and fragrant odour, and a hot pungent taste; very inflammable, and so volatile as totally to exhale when left exposed in a warm air. Sp. gr. 0'985: it occurs in round cakes, each weighing about 2 lbs., and is commonly packed in vessels containing nearly 250 cakes. The quantity of camphor exported from Canton varies much from year to year. In the United Kingdom about 650 cwts. are annually entered for home consumption. annually entered for home consumption.

Malay or Barus Camphor is found in great purity concreted among the woody fibres of the Dryobalanops camphora, growing in Borneo, Sumatra, and the Malayan Archipelago. As an article of commerce it is found exclusively in the East, and particularly at Canton, where it fetches a price equal to about 100 times that of the article made from their own L. camphora. The former is far more fragrant than the latter, but whether it possesses any superior virtues is exceedingly

CAMPHOR-OIL is a limpid fluid which exudes from the Dryobalanops can hora. It is much used in some parts of the East, but is not brought to Europe. phora. It is much used in some parts of the react, but is now prompt.

It is as agreeable as the concrete substance, and almost as cheap as spirits of turpentine. If by any contrivance it could in Britain be reduced to a concrete state, as has lately been done with the oil of the cocoa-nut, the produce might be advan-

tageously exported to China, and perhaps retained in part for home consumption. CAM-WOOD, a red dye-wood of a very fine colour, obtained from a tree principally found in the neighbourhood of Sierra Leone. It is chiefly used in turnery for knife handles and similar articles. About 1000 tons are annually entered for

home consumption.

CANADA BALSAM, a fine species of turpentine, obtained from the Pinus

Balsamea

Balsamea.

CANADA, the most important portion of British America, lies nearly all between the Hudson's Bay Territories and the United States, and, within the basin of the river St Lawrence, from about 42° to 52° N. lat. It was colonized by the French in 1608, and conquered by the British in 1759. There are two provinces, separated by the Ottawa river --Lower Canada, adjoining the estuary of the St Lawrence; area, 250,000 square miles; pop. (1836) 664,631, chiefly of French origin; capital, Quebec, pop. 30,000. Upper Canada, contiguous to the great lakes Ontario, Erie, Huron, and Superior; area, 105,000 square miles; pop. 371,332, chiefly of British origin; capital, Toronto, pop. 9765. Each province had formerly a governor, executive and legislative councils, and a house of representatives,—the governor of the lower province being likewise captain-general of all British America; but, by the act 3 & 4 Vict. c. 35 (1840, July 23) of the Imperial Parliament, the two provinces have been united. the two provinces have been united.

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Canada, though in some parts hilly, is upon the whole a level and well-watered country. The located portions are mostly confined to the hanks of the St. Lawrence, the lower part of the Ottaw, the N. margin of the Lakes Ontario and Erte, and the S. E. banks of lakes Huron and St. Clair, which are generally fertile. Beyond these districts, the country, more superfaily towards that which are generally fertile. Beyond these districts, the country, more superfaily towards that has held the country of the simosphere. In the lower province, the medium of cold in winter is about 15° Start, its maximum about -30°; and the medium summer load is from 75° to 50°, its maximum 105°. Early in December the St. Lawrence is closed by item, the medium totally disappears before the first wesk in May. The five months from May to this selection totally disappears before the first wesk in May. The five months from May to all the control of the country of the selection of selection of

Of manufactures, the principal is that of ashes, already noticed. The others are as follow:—Cloth, a kind of gray homespun or tieffe ds page, worn by the habitant or farmer of Lower Canada; coarse cotton, but only in small quantities; coarse lines; carpets and mats formed of threads obtained from old materials; straw hats; worsted stockings and socks; caps; leather mittens; from wares at 8t Maurice; nalis; maple sugar; bricks; while soap, candles, leather, linseed oil and cake are manufactured to an extent sufficient to furnish a surplus for exportation. Whisly is largely produced in both the Canadas. Btarch, blue, cider, cordage, paper, and a few other articles are also made, but in very small quantities. It is to be observed that these manufactures, with the exception of whisky, exist almost wholly without protection. But the domestic manufactures are supported more by the habits of the people than by cheapness; in fact the étoffe dupage is imitated in Britain at a much lower price than the Canadian cloth usually sells at in the native market.

Shipbuilding is an important employment in all the N. American colonies. The average number of vessels built annually in Canada, during the 11 years ending 1835, was 36, and their tomage 3849. These ships are built of oak, and are of much better workmanship than those of New Brunswick and Nova Scotia, which for the most part are constructed of pine.

The imports chiefly consist of British manufactures, principally cottons and woollens are mostly of the coarse and warmer sorts, such as biankets, flushings, fiannels, and the coarse cloths produced in the manufacturing towns of Yorkshire. The cottons are chiefly power-loom shritings, striped and checked cloths, printed calloese, ginghams, muslins, cambrics, and also finttians, velveteens, and similar fabrics. The other articles of British produce or manufacture imported in 1836 were as follow:—Hardware, value, £74,249; wrought iron, £65,598; glass, £24,069; haberdashery. £71,646; earthenware, £15,606; apparel and slope, £

haberdashery. £71.646; earthenware, £15,606; apparel and slope, £33,975; painters' colours, £17,426; besides coals, leather, books, candles, scap, stationery, salt, lead, cordage, hats, and a variety of other goods.

The other imports are principally composed of the following articles:—tea, about 680,000 lbs., brought chiefly from Britain; raw sugar, about 3,000,000 lbs. (maple sugar being extensively grown in the colony); rum, 380,000 galls.; brandy and gin, 290,000 galls.; wine, nearly 3500 pipes, namely, port, 500; madeira, 200; sherry, 200; Teneriffe and other low white wines, 700; bpanish and other low red wines, 1600; French and German, 200. London enjoys the chief part of this trade to Canada, as there is a discriminating duty of £7, 7s. per tun of 262 galls. on wines "direct from the place of growth." A considerable quantity of low white and red wines is also brought from the Mediterranean, after having been landed at Gibraltar; an expedient by which the high duty is evaded. The West India produce is for the most part imported direct from the place of growth, and chiefly from Grenada, Jamaica, and Demerara. Halifax in Nova Scotis has recently become an entrept for exchanging the productions of Canada and the West Indies; the former paying for her purchases in flour and other provisions consumed in Canada, are derived from thence. In early spring, teas, coffee, fruits, tobacce, and various groceries, are imported from New York by the way of Lake Champlain. The exports at 8t John's, on that lake, the chief seat of this trade, amounted, in 1823, to £8197; the imports of £146,800. In 1833, the former were £30,800, the latter £104,800. Of the imports fully two-thirds consisted of agricultural produce, all, it is said, required for Canadian consumption. An intercourse with the United States is also carried on from different points in Upper Canada, the duties on which amounted, in 1835, to above £10,000. Of this there were paid at Toronto, £3780; Kingston, £1517; Burlington, £1438; Port Stanley, £835; Brockvil

Montreal, both being warehousing ports, and the former a "free ports" under the act 3 & 4 Wm. IV.c. 59.

Quelec is a strongly fortified city on the north bank of the St Lawrence, in 46° 49' N. 71° 16' W. It is divided into two parts; the Lower Town, where are all the commercial establishments, is can a rock 900 feet above; and the communication with the lower town is maintained by a winding street, at the top of which is a fortified gate. The basin of Quebec is very spacious, being sufficient to contain 100 sail of the line. In 1836, 1146 ships entered this port, having a tonnage of 344,206; of which Great Britain, 890 ships, 291,235 tons; British colonies, 174 ships, 22,393 tons; United States, 50 ships, 19,619 tons; foreign states, 42 ships, 10,369 tons.

Montreal, in 45° 30' N. 73' 30' W., 18e about 180 miles above Quebec, on the south side of the slaand of Montreal, which is formed by the confluence of the St Lawrence and the Ottaws; pop. 35,000. Vessels of 600 tons come up to fit. The harbour is not large, but is always secure; the greatest disadvantage is the rapid of 8t Mary, about a mile below the town. Montreal is the commercial capital of Canada, being favourably situated for the lumber trade, and for intercourse with the Upper Province and the United States. Most of the business, even in Quebec, is carried on by branches from its mercantile houses. In 1836, there entered this port 98 ships, 25,289 tons; of which Great Britain 73 ships, 19,410 tons; British colonies 23 ships, 250 tons; foreign states, 2 ships, 47 tons. 2 ships, 487 tons.

Measures, which is money, duries, &c.

Measures and Weights are those of Great Britain, but with the old English measures of capatity. The minot, sometimes used in Lower Canada, is an old French measure, 90 of which are

Money and Exchanges.—Accounts are kept

and sales and purchases are made in pounds, shillings, and pence, Halifax currency, which is about 20 per cent. inferior to British, though the denominations and proportions are the same. The pound currency is four Spanish dollars, each dollar being called 5s. But the average value of the dollar in the London market is only 4s. 2d.; hence 4s. 2d. steriling = 5s. currency; or 16s. 3d. steriling = 2f. currency; or £100 steriling = £120 currency. The comparison of exchange is, however, complicated, by the assumption of a par departing widely from the value of the currency. This erroneous par is 4s. 6d taken as the value of the dollar, or £90 steriling equal to £100 currency; the rule being, add one-sinft to sterling to obtain currency. To make up the difference between the erroneous par and the average value of the currency,—as the approximate par,—it is necessary to make use of a nominal premium of exchange. Thus, when exchange is really wholly undisturbed, or, in other words, at par (£100 sterling selling for £190 currency), it is said to be at 8 per cent. premium. For example, bill on London, sterling £100; add premium 8 per cent. £8, makes £106; adding also one-sinth, £19, we have £120 currency £100 sterling. The better way would be to quote the dollar, or the pound, or the £100, at what each is respectively worth. Government exchange is thus quoted, so are sovereigns. The commissary-general of Canada quotes his drafts at 4s. 9d. or 4s. 18d. per dollar, as the case may be; that is, on being paid so many times 5s. currency, he will deliver a bill on the treasury of as many times 4s. 3d. or 4s. 18d. sterling. Sovereigns are quoted in the Canada quotes his drafts at 4s. 9d. or 4s. 18d. per dollar, as the case may be; that is, on being paid so many times 5s. currency, he will deliver a bill on the treasury of as many times 5s. currency, and many times 5s. currency, he will deliver a bill on the treasury of as many times 5s. currency, and the per cent. premium is in fact 2 discount, and 10 per cent. only 2 premium.

Those in the Upper Province were four in number:—The Bank of Upper Canada, with a capital of £200,000, that of Kingston, or the Midland District, with a capital of £100,000, together with the Agricultural and People's Banks, the paid up capital of which was probably £100,000 more. The Bank of British America, established in London in the year 1836, has also branches in various places. Most of the provincial banks are instituted on the American principle of limited liability.

Tariff.—The duties on imported goods levied in Canada are imposed partly by the authority of the British government, and partly by that of the colonial legislature. The former are called crown duties, and the latter provincial duties; the first being in sterling money, the latter in currency. In charging the duties, the dollar is received at 4a. 4d., which is 2d. less than the old par, but 2d. more than its real value. The provincial duties have no object besides the increase of revenue, not discriminating in any way between the sources of supply. The crown duties, on the other hands even the head of the records. wholly undisturbed, or. in other words, at part of the control of

CANAL, an artificial channel of water, adapted to the easy conveyance of goods in boats or barges, also sometimes for the purposes of irrigation and the supplying of towns with water. Navigable canals have existed since a very remote period, but were principally confined to the low countries adjacent to the alluvial deltas out were principally confined to the low countries adjacent to the alluvial deltas of large rivers, such as the Nile, the Euphrates, and the great Chinese rivers, and in Europe the Po and the Rhine. In such countries, indeed, nature may be said to have pointed out this method of communication, as in every way the most convenient and simple. In Holland, the canals answer all the purposes of highways, and may be likened in their number and utility to the turnpike roads of England; but as a pecuniary investment, the former yield an immense income to government, while the returns of the latter are hardy afficient to keep them in reasis. The but as a pecuniary investment, the former yield an immense income to government, while the returns of the latter are barely sufficient to keep them in repair. The canals of Holland are mostly formed in straight lines; and the country being quite flat, they are constructed very simply, and without any of the costly expedients of deep cutting, embanking, or tunnelling. The lock, which is an indispensable appendage to canals in this country, is comparatively a modern contrivance, having been first applied in Italy towards the end of the fifteenth century. The vast extent of water communication in China has no locks even to this day. As a substitute they have inclined planes of stone, over which they haul the vessels and launch them again in the upper level; thus applying main force to accomplish what is effected in the lock by simply letting in the water from the upper level into the trough, and thereby raising the enclosed barge. The first efforts of any consequence that were made in this country towards extending inland navigation, took place about the beginning of last century, and by the middle of it 40 acts had been obtained for improving and extending the navigation of some of the principal rivers in England. Experience showed, however, that navigation of this kind was liable to continual waste, and the works subject to destruction by floods. These difficulties suggested (in 1757) to the proprietors of the Sankey navigation in Lancashire the expediency of substituting a new cut alongside Sankey brook, instead of making the latter navigable. But it was the Duke of Bridgewater that first aroused public attention to undertakings of this kind, by a canal which he formed to coavey coal from one of his estates at Worsley to Manchester, about nine miles distant. The novel features of this work consisted then (1759) in its taking a direction away from all natural water courses, passing boldly across the river Irwell, at a height of 40 feet above it by means of an aqueduct 600 feet long, and tunnelling through the solid rock of a large hill to reach the mouths of the coal pits. This canal and many others were executed at the private expense of the Duke of Bridgewater, and completed with wonderful skill and ingenuity by Brindley, his grace's engineer. The signal success which attended these undertakings, opened the eyes of the nation to the advantages to be derived from still-water navigation; and extensions from the river Mersey to the Trent, Severn, and Thames, quickly followed. These, and the rapid formation of joint-stock companies, of which upwards of 100 have been incorporated for works of this sort, are evidence of the zeal with which such improvements have been prosecuted. Mr Telford, in his autobiography, mentions as an instance of the eagerness of the public about 1790 for canal speculations, that at the first general meeting of the promoters of the Ellesmere canal (112 miles long, and connecting the Mersey, Dee, and Severn), four

long, and connecting the Mersey, Dec, and Severn), four times the estimated expense was at once subscribed without hesitation.

In England, about 2400 miles of navigable canals have now been made, and wholly at the expense of private companies or individuals; in Ireland, 300 miles; in Scotland, 200. These works are unequalled for extent, and for difficulties of all sorts successfully overcome. As specimens of the latter may be mentioned the tunnel at Blisworth, on the grand Junction canal, which is 3030 yards in length. The underground cuttings in the Duke of Bridgewater's canal are said to be altogether 18 miles long, and to have cost £170,000. The Marsden tunnel, in the Huddersfield canal, is 5451 yards long. The tunnel at Sapperton, in the Thames and Severn canal, is 2½ miles in length, and 250 feet below the highest point of the hill through which it is made. In the Thames and Medway canal, between Gravesend and Rochester, a tunnel 2½ miles is cut through the chalk; and one of the tunnels of the Leominster canal at Pensax is 3850 yards long.

In the planning of canals, the first object is to select a line that conforms best with the levels and natural drainage of the country, so as to have as few locks as possible, and a plentiful supply of water to them at all seasons. The latter has to be regulated in a great measure by the amount of trade, or number of barges that pass the locks, and the water must be supplied at the highest part of the canal; but the greater part of the waste is generally owing to loss by leakage through the gates, absorption through the ground, and evaporation. It sometimes happens that the adjacent streams are insufficient in dry seasons, or their water is taken off for mills; in such cases, reservoirs must be constructed with weirs and sluices at a great expense. To prevent loss by absorption, the whole extent of the canal is lined with a clay puddle, impervious to water; and in embankments, vertical layers, or sunk walls of the same material, are generally placed at each side as fur security.

The expense of constructing canals depends so much upon local circumstances

The expense of constructing canals depends so much upon local circumstances that it is impossible to give data of general application. Some idea, however, of the relative proportion which one part of the work bears to another, may be had from the following abstracts of estimates by Mr Baird and Mr Telford.

Edinburgh Union Canal, 32 miles. (Mr Baird.) Cutting, embanking, puddling, towing paths, £71,000; bridges, aqueducts, tunnels, drains, £84,000; land, £23,000; fencing, £5500; nine locks, rise 110 feet, £17,000; reservoirs, £12,000; total, £212,500.

Leicestershire and Northamptonshire Canal, 42 miles. (Mr Telford.) Cutting, &c., £130,000; bridges, &c., £65,000; land, £18,000; fencing, £6700; total, £219,700.

The rise effected by a lock varies from 4 to 12 feet, according to circumstances, but seldom exceeds 8 feet. The expense appears from Mr Telford's estimates to vary in general from about £120 to £180 per foot rise.

The facilities of transit that are afforded by canals seem as yet to be confined to low rates of speed. Careful experiments, made with barges, proceeding at from one to four miles an hour, have shown that the resistance increases rather faster than the to four miles an hour, have shown that the resistance increases rather faster than the square of the velocity. At four miles an hour the power necessary to pull along ordinary loaded barges is 1-317th of the gross load, while at two miles per hour it diminishes to 1-1200th only. On a good level turnpike road the power requires to be 1-30th of the load, and on level railways about 1-220th; but they remain the same at all velocities. Thus at a speed of about 11 miles per hour the same power will pull along the same load on a canal as on a turnpike road; and a similar equality of advantage exists between a canal and a railway at a speed of 4½ miles per hour. Below this rate the canal has the advantage of the railway in point of economy; above it the railway has the advantage of the canal.

The stimulus given to internal intercourse by the success of railways, and especially the fears entertained by canal proprietors of the injury that their property was likely to sustain by their general introduction, has urged them of late, however, to effect considerable improvements in the construction of passage-boats; though as

to effect considerable improvements in the construction of passage-boats; though as the Forth and Clyde Canal Company have proved that a rate of velocity may be attained with horses, which at one time would have been deemed quite chimerical. This has been accomplished by extremely light barges called swift boats, weighing This has been accomplished by extremely light barges called swift boats, weighing only from 2 to 3 tons, and made very narrow so as to penetrate the water easily, and produce little disturbance. Their use is principally confined to the canals between Edinburgh, Glasgow, and Paisley; and their usual rate is from 8 to 9 miles the hour, not including stoppages or passing of locks. They carry from 80 to 90 passengers each, weighing with luggage from 5 to 6 tons. They perform the distance (56 miles) between Edinburgh and Glasgow in 7 hours. On the Grand Junction canal, between London and Birmingham, hy boats are employed, which average a speed of 4 miles per hour: they weigh from 7 to 7½ tons, and carry from 10 to 15 tons of goods. The ordinary heavy boats are dragged at the rate of from 2 to 2½ miles the hour: they carry 20 tons of goods, and weigh 6½ tons; others carry 24, and weigh 9 tons. [Stocks.]

Table of the cost of conveying goods and passengers on canals at different rates of speed. (Wood on Rail-Roads, p. 678; 1838.)

Desertation	Rate of speed in miles per bour.	Resistance in fraction of load.	Cost of haul- age per ton per mile.	Cost of boat-hire per ton per mile.	General Expenses per ton per mile.	Aggregate Charges.	
of Boats.						Useful load per ton per mile.	Gross load per ton per mile.
Slow boats Fly boats Swift boats	4	8 8 8 8 1 7 8 0	d. 0-18 0-50 0-275 per passen- ger. 34d. per ton		d. 0.86 2.34 9.7	d. 1·36 3·5 1·06 per passenger. 13åd. per ton.	d. 1-02 2-275 10d. per ton.

CANARY ISLANDS, a group belonging to Spain, situated in the Atlantic, off the coast of Morocco, between 27° 40′ and 29° 30′ N., and 13° 30′ and 18° 20′ W. The inhabited islands and their population (1837) are Teneriffe, 85,448; Canary, 72,779; Palma, 33,098; Lanzarote, 17,714; Fuerteventura, 14,096; Gomera, 11,722; Hierro, or Ferro, 4481; total, 239,338. The seat of the governor-general is at Santa Cruz, the port of Teneriffe, in 28° 29′ N., and 16° 15′ W.; pop. 8500. The other chief towns are Laguna and Orotava in the same island, and Las Palmas in Canary.

towns are Laguna and Orotava in the same island, and Las Palmas in Canary.

The aspect of the Canaries is, throughout, elevated, and some of the mountains, particularly the Peak of Teneriffe, rank among the loftlest in the globe. The sides of the mountains inclining towards the W. and N. exhibit, rising above each other, the plants of the torrid, the temperate, and even the frigid some. The islands are within the limits of the trade-wind, and the climate eminently salubrious. The most fertile are Canary and Teneriffe; Lanzarote and Fuerteventura are dry and sandy. About one-fifth of the surface of the whole islands is under cultivation. In a late consular return, the principal productions in one year are stated to be, wine, 46,226 pipes; potatoes, 151,800 quarters; wheat, 57,487 qrs.; maize, 39,576 qrs.; barley, 66,222 qrs.; rye, S343 qrs.; vegetables; 10,310 qrs.; barlila, 114,000 quintais; and orchilla, 1468 quintais. A small quantity of sugar is made, and there are manufactures of coarse linens, cloths, and silks. Domestic animals are plentiful. An active commercial intercourse exists among the different islands, and upwards of 30 vessels are employed in the fishery on the coast of Africa. The staple export is wine, particularly that called "Teneriffe," the better sort of which is equal to the middling kinds of Madeira, for which it frequently passes in England. In 1833, there were exported 3661 pipes from Santa Crus, of which, 1858 were sent to London, 988 to Hamburg and Bremen. 406 to the United States, and 181 to St Thomas; but the total export of wine from the islands in that year was 8664 pipes. The chief of the other exports are barilla, occhineal, orchilla, fruit, and raw silk,

with small quantities of brandy, vinegar, rock-moss, and tunny-fish. The imports consist of sugar, coffee, brandy, oil, leather for soles, wax, and a variety of manufactured goods. The amount of exports in 1833, according to the tariff valuation, was, to Spain, £34,305; America, £618,504 other countries, £63,534; total, £104,132; and imports from Spain, £39,047; America, £11,885; other countries, £135,539; total, £168,534. The imports of British and Irish produce and manufactures, amount annually to about £40,000; chiefly consisting of cottons and woollens, linens, iron, hardware, outloyr, giass, soap, earthenware, hats, and apparel. Foreign when, inches piece goods, and brandy, are likewise imported from this country. In 1838, 38 Phitish vessels arrived at Santa Crus, Teneriffe; 13 at the port of Orotava; 8 at Arectic in Lanzarote; and 12 at Port of Palmas in Canary.

The Canaries are frequently visited by ships for fresh provisions, which, except vegetables, may be obtained plentifully in most of the islands. There is, however, no accommodation for ships except open roadsteads, which are unsafe in winter.

Measurer, Weights, and Money, same as SPAIN.

CANARY SEED is the produce of an annual grass (Phalaris Canariensis).

Masures, Weights, and Money, same as Spain.

CANARY SEED is the produce of an annual grass (Phalaris Canariensis), chiefly oultivated near Sandwich in Kent; an acre yielding from 3 to 5 quarters. It is used extensively for the food of tame singing-birds.

CANARY WOOD, a fancy wood of a golden-yellow colour.

CANDIA, on CRETE, one of the largest islands in the Mediterranean, is situated to the S. of the Grecian Archipelago. Length, 160 miles; breadth varying from 6 to 35. Population 300,000. Capital, Candia, in 35° 21' N. 25° 3' E.; pop. 12 000. The island forms a Turkish naphalic

from 6 to 35. Population 300,000. Capital, Candia, in 35° 21′ N. 25° 3′ E.; pop. 12,000. The island forms a Turkish pashalic.

The coast, especially towards the N., is indeeded by deep guifs; on the 8. It is rugged and ironbound; and a continuous mass of high land runs through the whole length of the island. The soil is fertile, producing corn. especially barley, oil, honey, and wine, besides considerable quantities of cheese, wool, wax, silk, valonia, caroba, and a variety of fruits. The principal exports are, white soap (50,000 cwts.), sent chiefly to Turkey and Greece, oil, silk, raisins, caroba, valonia, almonds, chemuts, omages, lemons, and linseed; and the imports, grain, rice, cottons and piece goods, timber, leather and hides, tobacco, sugar, barilla, butter, salt fish, and other articles; the whole amounting annually to about £180,000 setzing. The chief commercial intercourse is with Turkey, Greece, Austria, and Egypt. According to a recent consular return, the average annual ratue of British manufactures and metals imported is about £29,000; consisting of cotton twists, 70,000 lbs.; gray calicoes, 4000 pieces; madapolams, 3800 pieces; long cloths, 500 pieces; cambrics, 1500 pieces; printed shawis, 500 dos; iron, 600 quintals; shot, 100 sacks. The most frequented port is Canea. Retimo has also a small harbour. That of Candia is much decayed, and nearly filled up. These three principal towns are all situated on the N. side of the island.

Measures and Weights.—The pie or ell = 25‡ lbs. avoird. A mule or horse load (by Imp. inches; the dennum is about 40 sq. yds.; which some duties are reckondy weighs about the mistach of vine varies from 3 to 5 galis.; the corn measure is the carga = 419 or nearly 4‡ Imp. both, it would be a spile to the size of the island.

CANDLE. Candles are manufactured from tallow, bleached bees²-wax,

CANDLE. Candles are manufactured from tallow, bleached bees'-wax, spermaceti, the concrete part of cocca-nut oil, and lately the concrete part of tallow has been separated by pressure from the oil, and made into candles, under the name of stearine. They are also made from mixtures of the preceding, and called composition, imperial wax, &c. Candles are always cylindrical, and have a wick formed of fine cotton in the centre. The use of the wick is purely mechanical; when lighted it first melts the colid candle which being drawn by capillary a wick formed of fine cotton in the centre. The use of the wick is purely mechanical; when lighted it first melts the solid candle, which, being drawn by capillary action, is diffused over the fibres of the wick, and thus prepared for decomposition and combustion. The quality of the candle depends very much upon the wick, as if too thin, it will melt more than the fibres can decompose, and the candle will run; if, on the other hand, the wick be too thick, the candle will smoke; owing to the melted part not being in a perfect state of combustion, for want of air at the centre of the wick. Wax and green from being less fluible then tally we are made the melted part not being in a perfect state of combustion, for want of air at the centre of the wick. Wax and sperm, from being less fusible than tallow, are made with a much more slender wick, which, bending over, is consumed by the oxygen of the atmosphere, and therefore requires no souffing. The best tallow candles are always firm and white. Wax candles, on the contrary, are never perfectly white when pure, but are a little inclined to straw colour. They should be hard and free of grease; when very white and opaque, they are adulterated with tallow. Pure spermaceti candles are readily distinguished by their transparency, and they are therefore seldom adulterated. Wax candles, on the contrary, are much adulterated; and it is not uncommon for dealers to quote their price at one-half of that of the raw material. of the raw material.

Tallow candles were formerly subject to an excise duty of 1d., and wax and spermaceti of 33d, per lb. These duties were repealed from 1st January 1832 (1 & 2 Wm. IV. c. 19). In 1830, the quantities brought to charge were, tallow, 115,586,192 lbs.; wax and spermaceti, 1,265,113 lbs.; and the net produce of the duty, £462,413; a considerable quantity of tallow candles were, however, manufactured privately. The exportation of candles is trifling, except to the West Indies. CANDY, a large East Indian weight, consisting generally of 20 maunds. The Madras candy of 20 maunds = 500 lbs. avoird.; the Bombay candy also of 20 maunds = 560 lbs., or 5 cwt. avoird., reckoned for grain at 25 Winchester, or 241 Imp. bushels.

CANDY, a preparation of sugar, made by melting and crystallizing it several

CANELLA ALBA, an aromatic tree common in the West Indies. The bark of the young branches, freed from its outer rind, is imported in rolls or quills two or three feet in length, or in small broken pieces, and employed as a stomachic. It has a bitterish, acrid, peppery, taste, and is sometimes called whits cinnamon. CANES are obtained from a variety of palms and plants of the reed kind. They are imported principally from the Malayan Archipelago, India, and China. The chief are the Bangoo and Rattan.

CANNA, or CANNE, a measure for cloth in Italy, and in the South of France, Spain, and other places.

CANNON. [Gun.]

CANTARO, a weight used in Italy, Egypt, and the Levant. It generally con-

tains 100 rottoli.

CANTEEN, a place in a fort or barracks licensed for the sale of liquors, tobacco, and provisions. The sale of liquors is not allowed except at the canteen, and the quantity sold at one time is regulated by the commanding-officer. The quarter-

master is responsible that no disorder occurs.

CANTHARIDES, called also Spanish fly or blister beetle, is an insect (Cantharis vesicatoria) found in the warmer parts of Europe, especially Spain and Italy. It is about three-fourths of an inch long, of a bright green colour, except the legs and antennse, which are bluish black, and is well known for its medical uses.

CANVASS, a coarse strong cloth made of hemp or flax, and used chiefly for

SAIL-CLOTH.

SAIL-CLOTH.

CAOUTCHOUC, GUM-ELASTIC, OR INDIAN RUBBER (Fr. Caoutchou. Ger. Federhars. Por. Boracha. Sp. Resina elastica. Ule), is obtained from the juice of several South American plants, particularly the Siphonia elastica, also from the Ficus elastica, a species of fig-tree. Incisions are made in the bark, chiefly in wet weather, and the flux, which is abundant and of a yellowish-white colour, is conducted by tubes into vessels for its reception. The caoutchone is afterwards separated by heat or exposure to the air. It is formed by the natives of S. America into pear-shaped bottles, by being spread over moulds of clay, and its dusky coating is communicated by exposure to smoke in order that it may be thoroughly dried. It is then commonly marked on the outside with various lines or figures, and the clay after having been softened with water is picked out.

Caoutchouc when pure, is destitute of taste and smell. Its sp. gr. varies from '930'

Caoutohouc, when pure, is destitute of taste and smell. Its sp. gr. varies from '930 to l. It is remarkable for its elasticity. It is insoluble in water and in alcohol; and is difficultly acted upon by acids and alkalis. It dissolves sparingly in washed ether; but in the coal naphtha, or oil obtained from gas works, it is softened and dissolved but in the coal naphtha, or oil obtained from gas works, it is softened and dissolved in a very remarkable manner, and the solutions have been applied to render various articles of clothing waterproof. The cloth thus prepared, besides being extensively used for cloaks, is so impervious to moisture and to air, that floating or hydrostatic beds for invalids are formed from it, and even beds and cushions are rendered elastic by inflation. Caoutchouc is besides employed for the erasure of pencil marks on paper by friction, for the manufacture of braces and surgical instruments, and it is cut by machinery into very fine thread, which is woven into a variety of ornaments and elastic fabrics. "Subjected to destructive distillation it yields a large relative proportion of a highly volatile and inflammable liquid hydrocarbon. This product, which is applicable to many useful purposes in the arts, is made upon a large scale by Messrs Enderby of London; it is a solvent of caoutchouc itself, and of other substances used as varnishes. The various applications of caoutchouc in the manufacture of clastic articles and other useful products,

tions of caoutchouc in the manufacture of elastic articles and other useful products, are as yet probably in their infancy only." (Brands's Chemistry.)

Caoutchouc is imported chiefly from Guinan, in the woods of which, as well as in the province of Quito, and along the borders of the Amazon, the tree grows abundantly. The consumption has of late years been greatly increased, partly owing to the entire repeal of the import duty, but chiefly from the discovery of its

application to waterproof clothing by Mr M'Intosh.

CAPE BRETON. [Nova Scotta and Cape Breton.]

CAPE DE VERDE ISLANDS, a group subject to Portugal, situated in the Atlantic, about 300 miles W. of Cape Verde in Africa, and consisting of ten islands, of

which the largest are St Jago, St Antonio, and St Nicholas; the smaller Mayo, Bona Vista, Sal, St Vincent, St Lucia, Brava, and Fogo, besides numerous islets. Population in 1830, 88,000, out of which 30,000 are said to have died of famine in 1833. Chief town, Porto Praya, in St Jago; lat. 14° 54′ N. long. 23° 30′ W. It is the residence of a governor-general, whose administration extends over these islands and the Portuguese settlements in Senegambia.

The Cape de Verde Islands possess little commercial interest, being mountainous and unproductive, and situated at a distance from the usual track of vessels destined for America and the Indies. Their productions are cotton, fruit, cattle, poultry, orchilla, goats, asses, mules, turtle, and salt. The latter is formed in large quantities by natural evaporation on the seashore, particularly in Mayo and Sal, which are frequented by American vessels for its collection. The amount of British produce and manufactures exported to these islands in 1838 was £1393, but in 1839, only

CAPE OF GOOD HOPE, a British colony composed of the portion of Africa lying between the Southern Ocean and lat. 29°S. Area about 150,000 sq. miles, but not accurately defined. Population (1838), 156,616, chiefly African-Dutch, negroes, and Hottentots. The administration of public affairs is vested in a governor, aided by executive and legislative councils.

and Hottentots. The administration of public affairs is vested in a governor, aided by executive and legislative councils.

The Cape territory is in general rugged and barren, and desident in the means both of internal and external communication. But a portion of the E. coast is of a different character, more especially towards the N. E. frontier, including the district of Albany, where the country is well wooded and watered, and favourable for agriculture and grazing. The W. coast, and a great portion of the rest of the country, consist of barren mountains and arid plains, one of which, the Great Karroo Desert, a high parched table-land, separating the Cape Town District from the finer country to the N.E., extends about 100 leagues in length, from E. to W., and 30 in breadth. The climats, however, is one of the finest in the world; and were the aridity of the soil countracted by irrigation, and the means of intercourse improved by the formation of roads, the character of the country would be very different, as the capabilities of the soil are naturally great. The only parts thickity settled are the Cape and Stellenbosch districts, which contain about 3-8th of the whole population, some parts of Worcester, Grazaf Reynet, and the British estillements at Graham Town and Bathurst, in Albany; the other portions are occupied chiefly by Dutch grasiers called beore. Nearly 295,000 acres are under crop, yielding annually about 540,000 bushels of wheat, besides smaller quantities of barley, oats, and rye; the remainder of the productive surface is chiefly pasture land. The principal mercantile commodity is wine, of which about 19,000 leaguers (1,516,000 Imp. galls.) are made yearly, besides about 1000 leaguers (196,630 galls.) of brandy. The vine is grown chiefly in the Stellenbosch district, and within forty miles round Cape Town; but the wines, except that made at Constantia, near Table Mountain, are almost all of very low quality. Of late years, part of the capital which was embarked in the wine trade has been introd

MEASURES, WEIGHTS, MONEY, DUTIES, &cc.

Measures and Weights.—1824 Dutch ells=100 | 24 dubbletjees, or 48 stivers = 1s. 6d. sterling, yds.; 493 morgen = 100 acres. The leaguer of 4 The currency principally consists of British coins and min and 115 English wine or 126 53 Imp. galls.; the muid or mudde of 4 schepels=3-06 Imp.bush.; the muid or mudde of 4 schepels=3-06 Imp.bush.; the "Cape of Good Hope Bank." and 915 Dutch lbs. = 100 lbs. avoird. The Dutch the "Cape of Good Hope Bank." and 915 Dutch lbs. = 100 lbs. avoird. The Dutch discounts bank has long extended to such a continuous bills, and issues notes. Much injury Money is reckoned in pounds, shillings, and pence sterling; or in rixdollars of 8 schellings,

tent that the paper rixdollar was depreciated from 4a. to 1a. 4d., its value prior to 1826, when it was fixed permanently at 1a. 6d. The Cape of Good Hope Bank, lately established, has its head office also at Cape Town; but it has branches at Graham Town and other places. Another jointstock bank has been projected at Graham Town; but it may be doubted now far the resources of that locality are yet sufficient to afford stability are yet sufficient to afford stability to such an institution. There are also two insurance companies, namely, the "South Africanges, only 2d, per ton; but if for refreshments or other papers, and the expenditure to £147,579; the last, however, was activate of the expenses of the last, however, was activate of the expenses of the last, however, was activate of the expenses of the last, however, was activate of the capenses of the last, however, was activate of the capenses of the last, however, was activate of the expenses of the last, however, was activate of the expenses of the last, however, was activate of the expenses of the last, however, was activate of the capenses of the last, however, was activate of the expenses of the last, however, was activate of the expenses of the last, however, was activate of the expenses of the last, however, was activate of the expenses of the last, however, was activate of the expenses of the last, however, was activate of \$2.188,697, and the expenditure to £147,579; the last, however, was activate of \$2.188,697, and the expenditure to £147,579; the last, however, was activate of \$2.147,579; the last, however, was activate of \$2.147,57

The Cape was discovered in 1493. Formal occupation by the English, 1690. Dutch colonisation, 1650. British conquest, 1795. Restoration to the Dutch, 1800. Recapture by the British, 1806; to whom the colony was finally ceded in 1815.

CAPERS (Fr. Capres. It. Cappari), the flower buds of the caper bush, (Capparis spinosa), a trailing shrub, which grows in profusion in Italy and the south of France, particularly between Marseilles and Toulon. They are used as a pickle, and about 70,000 lbs. are consumed in the United Kingdom yearly. The youngest and smallest are deemed the best.

CAPITAL consists of the accumulated savings of industry, capable of being employed either for the support of human existence, or as an instrument of production. It is distinguished by economists into two sorts, arising from a difference in the mode of applying it. Fixed capital consists of those articles of a durable nature which contribute to production without being destroyed. Such are roads, canals, houses, docks, harbours, warehouses, and those tools, machines, and other accommodations which do not perish in the using. Circulating capital possesses this distinctive character, that it is necessarily consumed in contributing to production, and that it must be reproduced in order to enable the producer to continue duction, and that it must be reproduced in order to enable the producer to continue his operations. Of this nature are food, coal, seed, wool, clothes, some kinds of tools, and all other articles subservient to production which perish in the using. These terms are not however always very definite. Thus, the lower animals are in some cases to be regarded as fixed, in others as circulating capital; oxen used permanently for draught, belonging to the former, but when reared solely for the market, to the latter. "It follows, necessarily, if the instruments of labour, the materials on which it is employed, and the subsistence of the labourer, are all included under the name of capital, increases when its capital increases, and declines when its capital declines. It is obvious that when there are more instruments of labour, more materials to work upon, and more pay for workmen, there will be more work, provided more workmen can be obtained. If they cannot, two things will happen: wages will be raised, which, giving an impulse to population, will increase the number of labourers; while the immediate scarcity of hands will whet the ingenuity of capitalists to supply the deficiency, by new inventions in machinery, and by distributing and dividing labour to greater advantage." (Mill's Political Economy.)

Capital, according to the sense in which the term is generally used in commerce,

Capital, according to the sense in which the term is generally used in commerce, does not differ essentially from that now explained. It comprehends in addition the debts due to traders; but in estimating capital in the aggregate, these must evidently be neglected, as what constitutes an article on the credit side of the books of one class of men, forms an exactly equal item of debt in the books of

The ratio of the accumulation of capital depends upon the degree in which production annually exceeds consumption. Accumulation is facilitated by the abatement of taxes, and by the removal of monopolies, and of all impediments to the free employment of the capital, labour, and skill of a nation. It is also increased by whatever tends to economize consumption in the different branches of industry, and by the prevalence of frugal habits,—objects which only can be secured by basing professional skill of every sort upon real knowledge, by the enlightenment of the people, and above all by the predominance of pure and simple tastes and sound morals.

CAPSICUM. [PEPPER.]
CARAT, or KARAT, a term used in a relative sense to express the fineness of gold. It means the twenty-fourth part of any given weight of that metal or of its

alloy. If such a weight be pure gold, it is said to be 24 carats fine; if three-fourths only be gold, it is said to be 18 carats fine. The diamond carat, however, is a definite weight = 31 troy grains; and the pearl carat = 5ths of a troy

The carat was originally the 14th of the old mare, or half-pound of the French, from whom the term is said to have come.

CARAVAN, a troop or body of merchants or pilgrims, as they travel with camels in the east. The Koran, as is well known, enjoins every Mussulman, who has the means, to perform a pilgrimage to Mecca once at least in his life. Dulhajia, as the name imports, is the month in the Mohammedan calendar peculiarly has the means, to perform a plugrimage to meeces once as local and the Landau hajis, as the name imports, is the month in the Mohammedan calendar peculiarly set spart for the performance of this solemnity. Formerly when devotional zeal was more ardent, the difficulties of the journey through the desert were held to increase the merit of the act, but of late a considerable portion of the hajis do not travel by land with the caravans, but arrive by sea at Jidds. The regular hajcaravans are six or seven in number, though they do not always make their appearance together, nor even perform the visit annually. One caravan proceeds from Syria, consisting chiefly of pilgrims from the Turkish empire. Another, issuing from Cairo in Egypt, conducts the Mogrebin, or African hajjis. A third caravan arrives from Bagdad with Persian pilgrims; and two smaller caravans go from Lahsa and Oman, besides a separate company of pilgrims from Yemen. The principal is that from Syria, which used to be accompanied by the caliph in person. During the whole route it is attended from town to town by the armed force of the district, and from Damascus to Medina it moves with great pomp across the desert,—a journey of 30 days. The Pasha of Damascus, or one of his principal officers, always escorts it; and the different classes of hajjis are stationed according to their town or district. At every stage (or distance of 11 or 12 hours march), is a storehouse for provisions, with a small garrison, and a large tank at which the camels receive water. The usual time of travelling is from three o'clock in the afternoon to an hour or two after sunrise next day,—torches being lighted in the afternoon to an hour or two after sunrise next day,—torches being lighted during the night. The pomp and magnificence of this moving solemnity are still considerable, though much diminished since the time of the caliphs, both in point considerable, inough much diminished since the time of the caliphs, both in point of splendour and attendance. In 1814, the Syrian caravan, which was reckoned small, amounted only to 4000 or 5000 persons, attended by 15,000 camels. But of late years the numbers are understood to have increased, owing to the greater security afforded by the Pasha of Egypt against the Bedouins and Wahabees. Most of the pilgrims undertake the tour with a view to profit. Some accompany the caravan as soldiers; some are pilgrims by profession, and are paid to perform the sacred journey for others; and except mendicants, almost every hajii combines mercantile adventure with his religious duties. So much is this now the case that the annual assemblage of Mocca. instead of a religious exercise. mercantile adventure with his religious duties. So much is this now the case that the annual assemblage of Mecca, instead of a religious ceremony, may be more properly regarded as the principal eastern fair for the exchange of the productions of Asia, Africa, and Europe. The Mogrebins bring their red bonnets and woollen cloaks; the western Turks, shoes and slippers, hardware, embroidered stuffs, sweetmeats, amber, European trinkets, and other small wares; the Anatolians bring carpets, silks, and Angora shawls; the Persians, Cashmere shawls, and large silk handkerchiefs; the Afghans, plain coarse shawls, beads, &c.; the Indians import the numerous productions of their rich and extensive regions; the people of Yemen bring sandals and various articles in leather; and of late years an increased quantity of European manufactures are carried there through various channels. Besides the religious caravans, there are many others which travel betwirt various places both in Africa and Asia. Thus, the intercourse betwixt Egypt and Barbary and the interior of Africa is conducted by means of these associations;

Barbary and the interior of Africa is conducted by means of these associations; the trade between Russia and China is likewise a caravan trade; as is that between Aleppo and Bassora, and Bagdad; similar lines exist in the countries to the E. of the Caspian; and others on a smaller scale are constantly occurring at various places where travellers and others assemble and organize an expedition for their mutual safety; one of their number being elected to regulate the order of march, and others to adjust disputes.

^{4&}quot; Notwithstanding the robberies and violence of legal and illegal bandits, the commerce of the east, without exchanges or post offices, canals or railroads, insurances or credit, unprotected by courts at home or consuls abroad, unprotected by a legislative body, where all interests are duly represented,—extends its gigantic operations from Mount Atlas to the Yellow Sea; from the Bine Mountains amid the deserts of Africa to the Balkal in the wastes of Tartary; and by the slow and noiseless step of the camel, maintains the communications, exchanges the produce, and supplies the wants of three-fourths of the globe. It is impossible to witness the arrival of the many-tongued caravap at its resting-place for the night, and see unladen and piled up together

the bales from such distant places,—to glance over their very wrappers, and the strange marks and characters which they bear, without being amazed at so eloquent a contradiction of our preconceived notions of indiscriminate despotism and universal insecurity of the east. But while we observe the avidity with which our goods are sought, the preference now transferred from Indian to British musiks, from Golconda to Glasgow chintses, from Damaccus to Sheffield steel, from Cashmere shaws to English broad cloth; and while at the same time the energies of their commercial spirit are brought thus substantially before us, it is indeed impossible notto regret that a gulf of separation should have so long divided the east and the west, and equally impossible not to indulge in the hope and anticipation of a vastly extended traffic with the east, and of all the blessings which follow fast and welling in the wake of commerce." (Urqukert's Therkey, p. 134.)

CARA WAY a hierantial numballiferenus plant (Casessa carrei), unitivated in the

CARAWAY, a biennial umbelliferous plant (Carum carui), cultivated in the southern districts of England, chiefly for its seeds, which are used to a considerable extent in confectionery, also for flavouring cheese, spirits, and liqueurs, and in medicine. The seeds have an aromatic smell, a warm pungent taste, and yield much essential oil. They are largely imported from Holland.

cannel. The seeds have an aromatic smell, a warm pungent taste, and yield much essential oil. They are largely imported from Holland.

CARBUNCLE, a name sometimes given to the Precious Garnet, or Almandine. CARDAMOMS, a spicy seed obtained from small plants growing in India, Ceylon, and Java. They are of two sorts, called the lesser and greater seeds.

Lesser Cardamom seeds are a product of the Elettaria cardamomum, which is produced in great abundance on the Malabar coast. They are small, almost black, nearly triangular, rugose, with an intensely aromatic taste, and a fragrant camphoraceous smell, and are contained in a triangular membranaceous capsule, pointed at both ends, about half an inch long, and trilocular. They are much used in medicine, and as a condiment. In India they are an article of great importance.

Greater Cardamom seeds, or the grains of paradise seeds, are a product of the Amonum granum paradisi, cultivated in Ceylon and Java. They are much larger than the preceding, more pungent, and less aromatic. They are sometimes imported into England, but are not esteemed.

Mr Milburn states that cardamoms are reckoned to keep best in a body; and are therefore packed in large chests well jointed, pitched at the seams, and otherwise properly secured, as the least damp greatly reduces their value. (Oriental Commerce. Ainsiës Mat. Ind.)

CARDS and DICE. The manufacture and sale of these articles are regulated by 9 Geo. IV. c. 18; its chief clauses are as follow:—

by 9 Geo. IV. c. 18; its chief clauses are as follow:

by 9 GeO. 1.v. c. 10; 148 chief clauses are as 10110w:—

§ 2. An annual license costing δs . shall be taken out by every maker of cards or dice, under penalty of £100, and a duty of 1s. shall be paid for each pack of cards (to be specified on the ace of spades); and of 20s. for every pair of dice. § 7. Manufacture to be confined to cities of London, Dublin, and Cork, under penalty of £100. § 24. No playing cards shall be sold as waste cards, unless a corner of every such card shall be cut off at least half an inch in depth, nor unless the same shall be sold or exposed to sale in parcels, without being selected in any exapper, or other cover. § 25. It shall be lawful for any person, not being a licensed maker of cards, to sell any pack, not withstanding the same may have been previously sold and opened, or used, if every such pack shall be sold without the wrapper or lew of any licensed maker, and shall contain not more than 25 cards, including an ace of spades duly stamped for use within the United Kingdom, and shall be enclosed in a paper or wrapper with the words "second hand cards "printed or written in distinct and legible characters on the outside thereof. No foreign cards shall be warehoused without having the name of the maker thereon.—The stamp-duty on cards and dice annually amounts to about £14,000. For present duties, see 16 & 17 Vict. c. 59.

CARGA, a liquid measure in Barcelona, equal 27½ Imp. galls.; also a Spanish eight. In Candia it is a corn measure, equal 4½ Imp. bushels. CARMINE is a beautiful red pigment, made of cochineal and alumina, or oxide weight.

CARNELIAN, an ornamental stone, so called because some kinds are of a flesh colour, is a variety of agate or calcedony. Carnelians, when recent, are dark olive green, inclining to greenish gray; but, by exposure to the acceleration they become generally of a reddish colour, though sometimes yellow or white, the deep clear red being, however, the most valuable. They are never figured or striped. The great supply is from Japan, and they are also imported from Bombay, being collected in the province of Guzerat; but the best come from the Gulf of Cambay. Many of the antique gems are engraved in carnelian, and it is now much used for seals.

much used for seals.

CARPETS (Fr. Tapis. Ger. Toppichs. It. Tappeti. Rus. Kourti). The principal localities of the carpet manufacture are Kidderminster in Worcestershire, Wilton in Wiltshire, Axminster in Devonshire, Yorkshire, and Kilmarnock, Edinburgh, and Stirling, in Scotland. The term Kidderminster is applied not only to the carpets made in that place, but likewise to the Yorkshire and Scotch. Other kinds of British carpets are distinguished as "Brussels," "Venetian," and "Damask Venetian." The Brussels are in fact Wilton carpets; they are com-

posed of linen and worsted, and comprise the most important branch of the manufacture. The more extended use of carpets of late years has led to so great an increase in this branch of manufacture, that it is said to have been quadrupled since the beginning of the present century. In a well written article on carpets in the Penny Cyclopedia the number of looms in Britain is estimated at 4000, and their yearly produce at £1,000,000. The exports are chiefly to the United States. A few carpets of most beautiful fabric are still imported from Turkey and Persia; but the oriental carpets are now nearly equalled by the best of those made in Axminster, Wilton, and Edinburgh. The Scoto-Persian and Scoto-Turkish carpets made in Edinburgh have of late years obtained high celebrity.

CARRIAGES. [COACE. PASSENGER.]

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CARRIAGES. (COACE. PASSENGER.)

CARRIAGES (I COACE. PASSENGER.)

CARRIAGES (I was thereby provided that carriers should not be liable for the loss or injury of gold or silver (in coin or otherwise), jewellery, watches, clocks, trinkets, notes or other securities for payment of money, stamps, maps, writings, title-deeds, paintings, engravings, plated articles, glass, china, silk, furs, or lace, whether delivered for simple carriage, or accompanying a passenger, when the value exceeds £10, unless the value has been declared at the booking-office, or other proper place, and the usual increased charge paid for conveyance. The rate of increased charge must be published, by notice affixed in legible characters, on some conspicuous part of the office. When the increased rate is paid, the person in attendance must give a receipt (which is not liable to stamp duty) if required, otherwise he loses the benefit of the act, and becomes responsible at common law. Carriers are liable for the safety of goods not specified by the act, notwithstanding any advertisement to the contrary. Where the increased rate is paid with a parcel, the party entitled to recover damages, on its loss or injury, is also entitled to recover the increased charge. Carriers are not concluded against as to value by the additional rate being so paid, but may require proof from the party suing. [There are separate being so paid, but may require proof from the party suing. [There are separate statutes affecting the liability of shipowners. Shipping.]

It is ruled that one who holds himself out as a carrier to all comers, cannot

It is ruled that one who holds himself out as a carrier to all comers, cannot refuse goods offered for conveyance if he have room for them, unless he can show that they are of a nature calculated to injure other property. As a counterpart to the obligations which he thus comes under to the public, the carrier has a lien on the property conveyed by him for his charges. The lien is particular, not general, and so one set of goods cannot be detained for the charges on a previous set. (Jones on the Liabitisies and Rights of Common Carriers.)

CARROT, an umbelliferous plant (Daucus carota), having a succulent root, which is largely used as human food, and in some places for the maintenance of stock, especially horses and dairy cows. The most esteemed for field culture in England are the Altringham, the Orange, and the Long-red. Professor Low states that, under favourable circumstances, the produce will be from 300 to 400 bushels to the acre, though much beyond this quantity is sometimes produced. Carrot seed is raised largely at Weathersfield, in Essex: it is also imported from Holland. CARTHAMUS. [Sapelower.]

CASCARILLA BARK. [Croton.]

CASH-CREDITS in the Banking System of Scotland. "A cash-credit," says Professor Bell, "is an undertaking on the part of a bank to advance to an individual, or to a partnership, such sums of money as may from time to time be

says Professor Bell, "is an undertaking on the part of a bank to advance to an individual, or to a partnership, such sums of money as may from time to time be required, not exceeding on the whole a certain definite amount; to be repaid, and a continual circulation kept up by the replacing in the bank of small profits and sums as they come in. The security upon which the advances are made, is a bond with sureties, generally two in number, for the repayment, on demand, of the sums actually advanced, with interest upon each issue from the day on which it is made; interest at a lower rate being allowed by the banker for the sums paid into the bank" (Commentaries, I. 367, 368). The security in short enables one to transact business with the bank, as if the sum for which the sureties have become responsible were actually deposited in his own name. When the banker discounts bills

to the holder of the account, he may either enter them to the debit in the account or hold them as separate transactions, but by adopting the latter step he is no or hold them as separate transactions, but by adopting the latter step he is not foreclosed from entering them afterwards on the account, and so making the sureties responsible. The bond thus covers every description of transaction on account of which the party may become responsible to the banker, whether it be by a single cheque drawn by the holder himself, or a bill discounted by him, for by a single cheque drawn by the holder himself, or a bill discounted by him, for payment of which the banker may have looked at first to another party. A cash-credit may be secured on real property. By an old Act of Parliament (1696, c. 5) securities for future debt could not be made real upon landed property. By a part of the old sequestration act, still in force (54 Geo. III. c. 137, § 14), this rule was so far modified that proprietors of lands might pledge them, either directly for the security of a bank which grants a cash-credit, or by way of relief to the cautioners in a bond, provided that the principal and interest which may become due be limited to a certain definite sum to be specified in the security, not exceeding the amount of the principal sum, and 3 years' interest at 5 per cent. "The limitation," says Professor Bell, " is rather vaguely expressed in the act; but the meaning seems to be, that the sum to be secured shall not exceed in amount the principal sum which the person to be accommodated shall have the privilege of drawing, together with 3 years' interest of that sum" (Com. II. 241). Were the bond, in the case where the security given is personal, to place the sureties in the situation of simple cautioners, the security would be extinguished or would prescribe in seven years. cautioners, the security would be extinguished or would prescribe in seven years. [CAUTIONARY OBLIGATIONS.] The limitation, however, is avoided by the practice of binding the principal and his sureties as co-obligants, the former being only distinguished from the latter as the person whose drafts are to be honoured. By this means also, the obligation to follow out diligence or execution against the principal debtor, before the cautioners can be sued, is avoided. The bank will be bound to assign to the cautioners the bills and other obligations which they have entered on the account, but if the balance due exceed the sum secured by the bond, the banker will not be bound to give up papers on which advances have been made, unless they have been entered in the account as they were presented, so as to be looked upon as discounted on the credit of the guarantees. These last may terminate their responsibility by notice to the bank, and to the principal in the bond.

the bond.

"Where one granted a guarantee for a person who had a cash-credit, saying, 'Mr G. D. has mentioned to me that he may have occasion to overdraw his account to the extent of £3000; and, if he should do so, I hereby become bound to repay the same to you, in the event of his failing to do it; '-this was held not to be merely a guarantee for one advance, but to be an addition to the cash-credit, covering like it the balance on a series of transactions. Where, of three co-obligants in a cash-credit, two granted a letter requesting that it might be continued, 'in terms and to the extent of the bond,' on the holder's decease, in favour of his son, they were held conjunctly liable, though in terms of the bond there was a third obligant to share the responsibility with them, and they alleged that they granted the letter only as a continuance of their liability under the bond. Under a cash-credit in the regular form, the bank may introduce discounts of bils cash-account. The transactions charged on, however, must be strictly legal and regular. It was found on appeal, that the bank could not pursue cantioners on drafts drawn beyond the statutory distance (which was then ten, but is now fifteen miles), or wrong dated, where the bank-agent was aware of these circumstances; and this though the drafts were entered in accounts doqueted by the principal. A cantioner in a cash-credit for all bills on which C. F. is name might appear, was liable for bills discounted to C. F. & Co., a concern in which C. F. had no partner." (Burton's Manual of the Lase of Scolland, 462, 463; authorities quoted.)

CASHEW-NUTS (Fr. Noise d'Acasiou. Ger. Akaiuniësse. Por. Noses d'Acaiu.

CASHEW-NUTS (Fr. Noix d'Acajou. Ger. Akajunüsse. Por. Noses d'Acaju. Sp. Nueces d'Acaju) are kidney-shaped bodies attached to the fruit of a small tree (Anacardium occidentale) found in the West Indies and South America. The kernel is a wholesome article of food, and is used as an ingredient in puddings. It is also sometimes roasted for the purpose of communicating a flavour to Madeira wine. The cashow fruit is highly esteemed in Brazil.

wine. The cashew fruit is many coronal and the control of the cash of the cash

CASSENETTE, a fabric made of very fine wool, sometimes tastefully mixed

with silk or cotton. It differs from valentia and tollinette in having its twill thrown diagonally. Cassenette is much used for waistoostings.

CASSIA FISTULA (Fr. Casse fistulense. Ger. Purgiroassis. Pers. Khyer chember), a small tree indigenous to India, Ceylon, and Egypt, and cultivated in Jamaica. The fruit is a brownish-coloured pod, a foot or more in length, but scarcely an inch broad. The pulp of this pod has aperient properties, but it is now little employed. Two sorts of them are imported,—East Indian and West Indian. The former are the smallest and smoothest, and are generally preferred. (Duncan's Dispensators)

Dispensatory.)

CASSIA LIGNEA (Fr. Casse en bois. It. Cassigna. Sp. Cassia lencea. Por. Cassia lenhosa. Ger. Kassienrinde. Du. Mocderoaneel Houtkasrie), a bark resembling cinnamon, procured, according to some, from the Cinnamonum Zeylani.

Carlon sinnamon, trea though on better grounds ascribed by others to the oum, or Ceylon cinnamon-tree, though on better grounds ascribed by others to the C. Cassis (Blume), indigenous to the forests of Quang-tung and Quang-see in China, but cultivated in the Eastern Islands. The cassis consumed in Europe is chiefly but cultivated in the Eastern Islands. The cassis consumed in Europe is chiefly imported from Canton. It resembles cinnamon, but generally may be distinguished by being thicker and less quilled. It has also a fainter odour, breaks shorter, and is more acridly pungent to the taste. Mr Milburn recommends that "it should be chosen in thin pieces, of an agreeable, biting, and aromatic taste, and the best is that which approaches nearest to cinnamon in flavour; that which is small and broken should be rejected" (Oriental Commerce). This bark is chiefly employed as a substitute for cinnamon. In 1834, the exports from Canton by the British amounted to 2,347,600 lbs.; and by the Americans to 1,468,933 lbs.; the price in Canton being about 3d. per lb. The importations into the United Kingdom were, in 1833, 1,297,710 lbs.; in 1834, 2,066,336 lbs.; in 1835, 1,966,303 lbs.; in 1836, 837,413 lbs.; in 1837, 984,674 lbs.; in 1838, 369,598 lbs.; in 1839, 430,511 lbs. The quantity entered annually for home consumption is about 100,000 lbs.; the surplus is re-exported to all parts of Europe, except Portugal; also to Canada, West Indies, and Brazil. and Brazil.

Cassia Buds (Du. Kassielblamen. Por. Flores de Cassia), are produced by the same plant as the cassia bark, and are imported from China. They are of a dark brown colour, with a form like that of a nail. The flavour and taste resemble

those of cinnamon.

Cassia Oil is of a fainter colour than cinnamon oil: taste acrid and pungent. and odour agreeable.

and odour agreeable.

CASSIS, a kind of black currant (Ribes nigrum) formerly celebrated for its medicinal properties, but now only used in preparing the liqueur called ratafia.

CASTOR (Fr. Castoreum. Ger. Bibergiel. Rus. Boboowaja struga), a concrete medicinal substance of a peculiar nature, found in two pear-shaped bags situated beside two smaller follioles, in the inguinal region of both seres of the beaver. It is of a penetrating unpleasant odour, and a bitterish and somewhat acrid taste. There are two kinds, the Russian, and Canadian or English, of which the former, now very rare, is the most esteemed. The Russian castor occurs in pairs of bags of unequal size, from 3 to 4 inches long, and 1½ to 2 inches broad at the base. The bags of American castor are smaller, narrower at the base, and much corrugated. That which is very old, quite black, and almost destitute of taste and smell, should be avoided. It should be kept in a cool place, and in a well-corked bottle. CASTOR NUTS. [Castor Oil.]

CASTOR OIL (Fr. Huile du ricin. Ger. Risinus korner. It. Ofio di ricino)

CASTUR UIL (FT. Huile du ricin. Ger. Misinus korrer. 11. Caso as ricino) is prepared from the seeds of the Ricinus communis or Palma Christi, a plant which grows in the East and West Indies, America, and the S. of Europe. The oil is obtained from the seeds either by expression without any assistance from heat, or by boiling. The first, called cold-drawn castor-oil, is always to be preferred. It is of an amber colour, and of a slightly nanseous smell and taste. The oil obtained by boiling the seeds is more deeply coloured, more acrid, and more liable to become rancid. Castor oil is one of the most valuable aperients we possess and the consumption has greatly increased since the late reduction of the duty sess, and the consumption has greatly increased since the late reduction of the duty to ls. 3d. per cwt. It is chiefly imported from India, but smaller quantities are also brought from North America and the West Indies; that from Jamaica being of a superior quality. The castor nuts or seeds are now likewise imported in considerable constitute and the city residerable constitute. siderable quantities, and the oil manufactured in this country. The nut or capsule is trilocular, nearly the size of a large marble, of a pale green colour, and usually contains three whitish seeds of an oblong flat shape, and heavy taste. (Ainslie's Mat. Indica.)

CATECHU (Fr. Cachou. Ger. Katchu. Can. & Hind. Cutt. It. Catech

Catoiu, Catto), formerly called Terra Japonica, is an astringent extract, chiefly prepared from a decoction of the brown heart-wood of the Acacia catechu, a tree indigenous to Hindostan. It is a dry, opaque, friable substance, of various forms, rounded masses, or cut into discs, squares, or lozenges. Its taste is powerfully sstringent, afterwards bitterish, then sweet, and its colour varies from pale brown to chocolate brown, the darker coloured being the most astringent. It is soluble in water, but more easily in alcohol. It seems to keep for any length of time without change. Catechu contains a greater proportion of tannin than any other substance known, I lb. being in this respect equal to about 7 or 8 lbs. of oak bark. Two sorts are chiefly imported, namely, an inferior kind from Bengal, and another of a yellowish-brown colour from Bombay. There is but little difference betwirt the two varieties; but according to the analysis of Davy, the Bombay catechu affords the greater proportion of tannin, and is therefore preferable. It is consumed in enormous quantities as a masticatory by the Malays and other betel-eating nations. In this country it was used solely as an astringent medicine, until of late, when it has country it was used solely as an astringent medicine, until of late, when it has

been employed for tanning.

CATLING, or CATGUT (Fr. Corde à boyau. Ger. Darmsaite. It. Corde di budella), cord made of the twisted intestines of the sheep. There are different kinds, as whip-cord, hatters' cords, cords for bowstrings, clockmakers' cord, and fiddle and harp strings; these last, made of the peritoneal covering of the intestines, are chiefly imported from Italy, where they are manufactured of a quality superior to those prepared in this country.

chiefly imported from Italy, where they are manufactured of a quality superior to those prepared in this country.

CAT'S-EYE, a gem which presents a beautiful opalescence like the light of the eye of a cat. It is a variety of fibrous quartz, interspersed with thin filaments of asbestos. It is often brown and red, but commonly of a grayish or greenish colour, and generally translucent. This stone, which is chiefly procured in Ceylon and Malabar, is held in high estimation. Among the late King of Candy's jewels, sold by auction in London in 1820, there was a cat's-eye, which measured two inches in diameter, and brought upwards of £400.

CAT-SKIN. [Fur.]

CATTLE (NEAT), or OXEN. The domestic ox (Bos taurus), said to be of Asiatic origin, is found from the equator almost to the limits of vegetable life. From an early period. Britain has owed no small part of her opulence to the ex-

Asiatic origin, is found from the equator almost to the limits of vegetable life. From an early period, Britain has owed no small part of her opulence to the excellence and numbers of cattle possessed by her. The varieties or breeds are greatly diversified both by natural circumstances and by the effects of art in changing their properties and form. According to Professor Low, the types of the cattle of this country are as follow:—1. The mountain breeds, comprehending those small hardy animals which are naturalized and reared in the more elevated parts of Scotland, Ireland, and Wales. 2. The Devon breed, a medium-sized breed, generally of a bright red colour, peculiar to the S. of England, and of which the parent stock is the North Devon. 3. The long horned (suited to field grazing and rougher treatment), prevailing chiefly in the humid and western parts of England and the lower districts of Ireland, and of which the most improved variety is the Dishley. 4. The short horned (suited to stall feeding, and the practice of the most improved agriculture), more peculiarly belonging to the dry and eastern parts of the country, and of which the most improved variety is the Teeswater, called also the Dutch or Holstein. 5. The Alderney, a small delicate breed found almost exclusively in the islands of the British Channel. The breed of short horns is the most esteemed; it is indeed said, that it has in form, disposition to fatten, and early maturity, been in the islands of the British Channel. The breed of short horns is the most esteemed; it is indeed said, that it has in form, disposition to fatten, and early maturity, been brought to all the perfection of which the ox seems to be susceptible (Low's Agriculture). Mr Youatt states that this country "has to boast of more than eight millions of cattle unrivalled in the world. 160,000 head of cattle are annually sold in Smithfield alone, without including calves or the dead market—the carcasses sent up from various parts of the country. If we reckon this to be a tenth part of the cattle slaughtered in the United Kingdom, it follows that 1,600,000 of them are sent to the butcher every very; and averaging the life of the ox or the cow at five sent to the butcher every year; and averaging the life of the ox or the cow at five years, the value of British cattle, estimated at £10 per head, will be £30,000,000."

Years, the value of the commerce in cattle, from its scarcely coming Little can be said regarding the commerce in cattle, from its scarcely coming Little can be said regarding the commerce in cattle, from its scarcely coming Little can be said to making accounts. It consists in a great measure in bringing within the range of the public accounts. It consists in a great measure in bringing the mountain-bred animals to fairs and public markets, where they are purchased by the lowland farmers, and afterwards fattened for the supply of the towns. The best are those produced in Argyllshire and in the Hebrides. The different islands contain about 150,000 of these cattle, of which it is calculated that not less than one-fifth are sent annually to the mainland. If these average £5 a-head, the amount will be £150,000. The cattle bred in the West Highlands are, at the age of 2 or 2½ years, removed into Dumbartonshire and the neighbouring counties. At 3 years old, they, along with large quantities from Galloway, are carried to the northern counties of England, and so by degrees southward, particularly to Norfolk and Suffolk, from whence the London market is chiefly supplied. Of late years, however, a considerable change has taken place in this course of trade, owing to the facilities afforded by steam-navigation; and large numbers are now fattened in the eastern and northern counties of Scotland, and forwarded to London direct from Leith, Dundee, Aberdeen, and other ports, and from the western ports to Liverpool. Of Irish cattle, about 100,000 are annually imported into the Mersey. Large quantities are likewise carried into the Bristol Channel, and fattened in the adjoining counties, particularly Somersetahire.

Large quantities are likewise carried into the Bristol Channel, and fattened in the adjoining counties, particularly Somersetahire.

The characters which indicate a dispetiton to feed, in the ex, are described by Professor Low to be—the fineness of the bones,—the largeness of the body, as compared with the limbs, neck, and head,—the broadness of the chest,—the roundness of the body,—and the soft and elastic touch. The last is a property with which all graziers are familiar. They call it a mellow feel, the meaning of which it is more easy to conceive than define. The form of animals that are best fitted to secrete and yield milk is somewhat different. "A dairy cow, like a feeding animal, and have the selection and mellow to the touch,—should have the back straight, the loins broad, the extremities small and delicate; but she should not, as in the case of the feeding animal, have the chest broad and prominent before. She should rather have the fore-quarters light, and the hind-quarters relatively broad, capacious, and deep; and she should have a large udder." (Pp. 508, 833.)

"The parts of an ox to which the term offile is usually applied, are the head and feet, the tailow, the hide and horns, and the entrails." "The tailow is generally considered to be of the same value, weight for weight, as the fish of the four quarters; and so likewise is the hide. These and the other parts termed offal are commonly regarded as forming about one-fifth of the value of the animal. When beef is add to be sold at a certain price, sinking the offals, the meaning merely is, that the whole price of the offals. That portion of the ox which is used for food, exclusive of the offals, is usually termed the quarters, because the animal, on being out up, is divided into four parts or quarters. The most esteemed parts for food are the hind-quarters. These weigh somewhal less than the fore-quarters; though the more perfect the form of the animals, the more nearly do the fore and hind quarters approach in weight. Practice enables persons to

See CATTLE TRADE, in Supplement.

BUFFALO CATTLE (Bos bubalus) are plentiful in Italy, North America, and eastern countries; also (B. Caffer) in the Cape Colony; but they are not reared in this kingdom. The buffalo is well-suited for heavy draught, and the milk of the female is good; but the flesh is held in less esteem than that of the ox. CATTY, the Chinese pound, equal to 1½ lb. avoirdupois. CAUTIONARY OBLIGATION, in the law of Scotland, is a term applied to a species of bond, which serves the part either of a mercantile guarantee, or of an English bond of security under seal covenanting in a penalty if a party do not perform certain stipulations. In its former capacity, the nature of the contract will be discussed under the head of Guarantee, and its application to one important branch of commercial law has been considered under the head of Cash-Credurs. It will be sufficient on this occasion to give a view of the legal privileges which make will be sufficient on this occasion to give a view of the legal privileges which make the adoption of this form of security desirable. The Scottish courts not being restricted, like those of common law in England, to the awarding of money for breach of agreement, a bond of cautionary, instead of stipulating for a sum of money being residual and appearing the cautionary. paid, and releasing the surety if certain specifications are duly performed by the principal, first enumerates the obligations to be performed, and then binds the cautioner to see them done, or to pay a sum of money. It is a privilege of the cautioner that means shall have been taken to exact performance from the principal before he can be had recourse to; but to obviate inconvenience arising from this presention it is not unusual for the cautioner to be housed as a principal along with practice, it is not unusual for the cautioner to be bound as a principal along with the primary debtor. When there is more than one cautioner, each is liable for the

whole, but he may exact payment of their respective shares from his co-cautioners. When a cautionary obligation is for the payment of money, it prescribes or becomes extinct, on the lapse of seven years. Where, however, by the terms of the bond the extinct, on the lapse of seven years. Where, however, by the terms of the bond the cautioner is taken liable as a principal, the prescription does not run in his favour, unless the bond contain a clause binding the original debtor to relieve him, or there be a separate document to that effect intimated to the creditor. One of the principal inducements for adopting this form in money transactions is, that the bond may contain a clause of registration [Registration, Clause of] on which execution may proceed without the intervention of a court. (Burton's Manual of the Law of Scotland, 451-467.)

CAVIAR (Fr. Caviar. It. Caviario. Ger. Kaviar. Rus. Ikra), a substance prepared in Russia from the roe of the sturgeon and other large fish. The roe is first freed of its membranes and washed in vinegar or white wine. It is afterwards

freed of its membranes and washed in vinegar or white wine. It is afterwards dried in the air, salted, and the liquor being removed by compression in a bag, it is finally packed in kegs. When good, it is dry and of a brown colour, and is generally eaten with oil and lemon juice. Caviar is highly esteemed in Russia, and the consumption is very great. The best is made on the shores of the Caspian. A considerable quantity is exported from the ports of the Black Sea to Italy, but only a

derable quantity is exported from the ports of the Black Sea to Italy, but only a small portion is brought to this country.

CEDAR, a name applied to several distinct kinds of forest trees. The cedar of Lebanon is a valuable species of pine (*Pinus cedrus*), cultivated in gardens and parks in this country on account of its majestic appearance, but seldom for economical purposes, as it is slow of growth, and requires a free space for circulation of air. The wood has a fragrant odour, and is so bitter that no insect will touch it,—a circumstance which accounts for its great durability. The cedar of Lebanon was, in ancient times, much employed in religious buildings, and most readers are familiar with the descriptions given of it for this purpose in Scripture. The tree is still to be found thinly scattered in the elevated valleys of Lebanon, Taurus, and other mountain-chains in Asia Minor. A second species (*P. deodara*) exists in the Himalayan mountains, where it is regarded by the natives with great veneration. veneration.

The other kinds of cedar do not belong to the pine family. The white cedar of America (Cupressus thyoides) is employed for hoops, small boats, and roofing, but is not of great value. The Bermuda cedar (Juniperus Bermudiana) is a large tree used for shipbuilding. The red cedar (Juniperus Virginiana) of North America and the West Indies is of great size and valuable. The wood is close, dark red, and odoriferous, and is much employed for cabinet work, wainscoting, and in

the manufacture of pencils.

Cedar is imported in considerable quantities from Jamaica, the Bermudas, Bahamas, Carolina, Cube, and New South Wales.

CELERY (Apium graveolens), as sweet and wholesome vegetable, of which there are several varieties. The blanched footstalks of the leaves are used as an esculent. The red variety is coarse but hardy, and well adapted for stews and soups. Celeriae is a turnip-rooted variety, occasionally imported from Hamburg.

CEMENT is a substance used for joining or covering bodies, in order to keep them from being acted on by fire or some other agent. Its nature differs of course according to the purpose for which it is employed.

CENTNER, a name applied to the hundredweight or quintal in Germany and

Holland

Holland.

CENTRAL AMERICA, formerly the Spanish captain-generalship of Guatimala, is a republic, situated on the isthmus which connects N. and S. America, betwixt 8° and 18° N. lat., and 82° and 94° W. long. It is bounded N. by Mexico, E. and N. E. by the Atlantic, S. E. by New Granada, and S. and S. W. by the Pacific. Area, 150,000 sq. miles. Population, whites (Spanish Creoles), 475,000; Indians, 685,000; ladinos or mulattoes, 740,000; total 1,900,000. The republic is a confederacy of five states, Guatimala, Salvador, Honduras, Nicaragus, Costa-Rica, and a federal district. Capital, New Guatimala; pop. 50,000. The legislative power is vested in a federal congress, composed of deputies elected in the proportion of one to every 30,000 inhabitants, and half the members are re-elected annually. The senate, consisting of two members from each state, has the sanction of the laws, and acts as a council to the president, but is not considered as a house of congress. The executive power is vested in a president and vice-president. The elections are made through the medium of electoral colleges as in France.

Central America is traversed by the Andes, and the difference in the elevation of its surface is per-

Central America is traversed by the Andes, and the difference in the elevation of its surface is per-haps greater than in any other country of equal extent,—a circumstance which produces a corres-

ponding difference in its climate and productions. Its vegetable products include not only those of tropical countries, but nearly all those of Europe, besides others pseuliar to itself. It also possesses mines of the precious metals, which, though but little encouraged under the Beanish dominion, are said to be increasing in their products. Gold is found in Cost-Rica, and silver in Honduras. The great staples of the federation, however, are indigo, occhineal, smaparilla, hidsa, mahogany, codar, dye-woods, sugar, rapadura or panels, a species of brown sugar principally used for the distilling of spirits, cotton, vanilla, and Peruvian balsam. The indigo is chiefly grown in the state of Salvador, along the Pacific; it is of excellent quality, and formerly about 1,000,000 lbs. were exported; but the civil wars having reduced its cultivation, a late account estimates the crops at from 500,000 to 250,000 lbs. The Nopal trees, on which the ochineal insect subsists, grow in the plains near the city of Guatimala, where the quantity collected in favourable seasons has amounted from \$90,000 to 250,000 lbs. The Nopal trees, on which the ochineal face of excellent quality; it is, however, always exported in an indifferent state, from not being properly freed from the seed. Good tobacco is grown in the hilly districts; but it is the subject of a government monopoly, and its cultivation being limited to certain places and to a certain amount, little is exported. Besides these articles, brimstone is collected from certain volcances, and sait is made on the north-western coast. Other parts of the republic are said to afford mother-of-pearl and to-toise-shell. Manufactures of ccarse cotton and woollen goods, hata, crockery, furniture, and other common articles, are carried on to some extent, chiefly in fundamental tenders of the republic are said of smella latings or chiefles and content of the republic are all of graefa latings.

Measures and Weights, same as SPAIN.

Money.—Accounts are stated in peace or current dollars each of 8 reals. The Central American hard dollar is of equal weight and standard with the Spanish. [Maxico.]

Finances.—The revenues are derived chiefly from the customs duties and the tobacco monopoly; their present amount is not known. The public debt consists of a domestic debt of \$3,800,000,

CERTIFICATE. [Customs.]
CERTIFICATE, in the bankrupt law of England and Ireland, is a testimonial on the part of a certain proportion of the creditors that the bankrupt has surrendered and conformed himself to the acts. It is the authority for discharging the bankrupt. As to the rules for granting the certificate, and its special effects, see BANKBUPICY.

EMARRUPICY.

CERUSE, or WHITE LEAD, is a carbonate of lead, usually made by suspending thin plates of lead over heated vinegar, the vapour of which corrodes the metal, and converts it into a heavy white powder. The process is most destructive to the health of the manufacturer. White lead mixed with oil is a common paint. In medicine it is employed as a dressing for sores; and, notwithstanding its deleterious qualities, has been used as a cosmetic.

CECCO BONDELIM is Scaled in the process of the p

CESSIO BONORUM, in Sootland, is the process by which the effects of an insolvent debtor, who does not come under the system of sequestration applicable to traders, is divided among his creditors. This system, which may be traced to the civil law as practised throughout Europe, has long existed in Sootland, and its practice there seems to have been the model on which the earlier English insolpractice there seems to have been the model on which the earlier English insolvency acts were framed. [Insolvency.] By the law as it stood till lately, the debtor applying for the benefit of cessio must have been a month in jail, but by the late act, any debtor imprisoned or against whom a writ of imprisonment for a civil debt is available, may apply. The process formerly could only be pursued before the Inner House of the Court of Session; but it may now proceed either before the Sheriff of the county, or before the Outer House of the Court of Session, subject, in certain circumstrance to a reference to the Inner House. There are provisions for certain circumstances, to a reference to the Inner House. There are provisions for the production and examination of the debtor and his books and other vouchers. The debtor will be liberated or protected from imprisonment during the process, unless the court see reason to the contrary. A list of the creditors with their debts must be inserted in the petition, and they must receive notice either by post-paid letters, or judicial writs, to appear at the examination. When decree of cessio is granted, it has the effect of conveying the debtor's whole property to a trustee for

distribution among his creditors. In the case of his holding an annuity or office, an equitable deduction is made from his income. By the decree of cessio, execution of all existing writs against the debtor is barred, but in the event of any pecuniary improvement in his condition, he is still responsible for his debts. The process of cessio is a privilege to the debtor,—the creditors cannot force him to submit to it. (1 & 2 Vict. c. 110. Burton's Manual, 594-600.)

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CEYLON, a magnificent island belonging to Great Britain, lying near the S. point of India, from which it is separated by the Gulf of Manaar. Extreme length from N. to S. 270 miles; average breadth, 100 miles. Area, 24,664 square miles. Population (1835) 1,231,000, of which 9000 were whites; the remainder chiefly Singalese, Malabar Hindoos, Moors, and Vedahs. The island is divided into five provinces, each subdivided into districts. The chief town, and seat of government, is Colombo, pop. 31,549. The administration is vested in a governor, assisted by executive and legislative councils.

Ceylon is an island of the highest natural capabilities,—having great varieties of soil, climate, and situation,—vegetable and other indigenous productions in excellent quality,—and considerable facilities of internal and foreign communication. In 1836, about 1,676,000 acres of land were cultivated or in pasture, and 2,818,000 acres was sown with paddy, 108,460 acres in pasture, of the former, 464,850 acres were sown with paddy, 108,460 acres with fine grains, and 1,070,460 acres in pasture. Of its mineral wealth little is known; iron and plumbago are abundant; and, according to some authors, gold, silver, and mercury are found in the hill streams. Nitre and nitrate of lime have been obtained; also alum and sulphate of magnesia. Salt is found in natural deposits, is also formed artificially in several parts, and yields a revenue of about £50,000. In the deposits or "leways" of Hambantotte, it crystalizes spontaneously, and of the finest quality, in quantities which might be sufficient for the supply of the greater part of the Malay islands. Ceylon is also rich in precious stones; the gens most esteemed are the ruby and cat's-eye, but there are likewise found the amethyst, topax, garnet, cinnamon stone, supplire, and diamond; and the pearl and chank fisheries in the Gulf of Manaar are among the

ivory obtained from them, however, is not very considerable. The manufactures are nearly confined to arrack, salt, coir, cordage, oil, coarse cloths, and the smelting of a small quantity of iron in the interior.

The commerce is not very extensive, but it has increased during the last few years, since the abandonment of the Dutch monopoly system,—an improvement which was effected under the auspices of the late governor, Bir R. W. Horton. The exports to Britain chiefly consist of cin-amon, coffee, and cocca-nut of; besides which, there are sent plumbago, cordage, cardamoms, pepper, horns, torioise-shell (chiefly from the Maldives), chony and satin wood; and the imports principally of British manufactures. The exports to India and the British colonies consist of arecanuts, arrack, tobacco, chiefly sent to Travancore, coffee, salt, occa-nuts, timber, hookah shells, coir, nipera lath, before de mer, sharks fins, and fish-oil; and the imports, of rice (brought in large quantities from India), cloth, sugar, opium and other drugs. In 1835, the estimated value of the exports to Great Britain was £79,869; to British colonies, £63,679; to the United States, £400; to foreign states, £15,272; total (exclusive of the produce of the pearl-fishery, estimated at £40,000), £185,900; the principal articles being coffee, £29,640; cinnamon, £21,890; coccanut oil, £13,100; coccanuts, £6784; arecanuts, £10,497; and arrack, £7371. In the same year, the amount of imports from Great Britain was £69,997; from British colonies, £23,290; coccanuts, £103, from Great Britain was £69,997; from British colonies, £21,690; coccanuts, £10,490; rice, £115,200; rice, £115,600; paddy, £23,937; and wheat, £7302. In 1836, the amount of exports had increased to £368,703, including £238,01 to Great Britain; the imports to £411,167, including £23,297 from Great Britain.

The chief ports are Colombo, Trincomalé, and Point-de-Galle.

Closabo, in lat. 6° 27 N., long, 80° E., where nearly the whole maritime trade of the Island is carried on, is a handsome t

Money.—Accounts are now generally stated in pounds, shillings, and pence sterling. Formerly shells which are used in small payments by the pice, or 144 chalies = 1s 6d. sterling. The circulating medium is composed of notes for £1 and upwards, issued by the colonial treasury, and payable in specie on demand; also of rixdollars, and the expenditure to £331,636, and the expenditure to £333,277; but this last was exclusive of an expenditure of spayable in specie on demand; also of rixdollars, of the island.

Ceylon is said to have been the chief mart for eastern commerce in the sixth century. In 1805, it was first visited by the Portuguese, who in 1818 subdued the maritime provinces. In 1836, the Portuguese were expelled by the Dutch, from whom again the island was wrested by the British in 1796. Until 1815, the English occupied only the maritime provinces, while the King of Candy possessed the interior; but in that year the monarch was deposed, and the whole island has been since under the sway of this country.

CHA NEW District hand a second of the sway of the country.

Candy possessed the interior; but in tax year was deposed, and the whole make the since under the sway of this country.

CHAIN, a British land-measure divided into 100 parts called links. The English or Imperial chain = 66 feet, and 10 square chains = 1 Imp. acre. The Scottish chain formerly in use contained 74·12 feet.

CHAIN-RULE, or RULE OF EQUATIONS, an arithmetical formula of German origin, which is of great practical utility, particularly in exchange calculations. It is so called from the terms being stated as equations, and connected as it were by a chain, so as to obtain by one operation the same result as by any number of different questions in the rule of three. The principle may be familiarly illustrated as follows

as 1010ws:—

Required the number of Roman pauls which may be had for £60 sterling, reckoning £1 = 26

French france, and 100 france = 200 pauls.

This case contains obviously two different questions:—

1. If 25 france be equivalent to £1, how many france may be had for £60?

1 : 60 : : 25 : 1500. 25 Answer, 1500 france may be had for £60.

1)1500(1500

If 100 francs be equivalent to 900 panls, how many pauls may be had for 1500 francs?

100: 900::1500:3000.

Answer, 3000 pauls may be had for 1500 francs.

1500 100)300,000(3000

which is evidently the answer originally required, as 1500 france are equivalent to £80, the original

which is evidently the answer originally required, as 1800 frames are equivalent to £80, the original term of demand.

In the course of these operations the term of demand, 60, is first multiplied into 25, then divided by 1, next multiplied into 200, and afterwards divided by 100. But it would obviously produce the same result to collect the multipliers and the term of demand into one product, and the divisors into another, and then to divide the former by the latter. The preceding case may, therefore, be stated thus:—

£60?
£71 = 25 francs
1000 francs = 900 pauls
And
$$\frac{60 \times 25 \times 900}{1 \times 100} = \frac{300,000}{100} = 3000$$
 pauls as before.

By this mode of arranging the terms, it is obvious that those which would form the divisors in continued statements in the Rule of Three are multiplied together for a common divisor, and the other terms for a common dividend.

The same reasoning may be applied to those cases which involve three or more different questions. Hence the following General Rule.—Arrange the several terms into two columns of antecedents and consequents, in this manner:—

GREEAL RULL—attenge the sevents terms into two contains a same and in this manner:—

1. In the right-hand column enter first the terms of demand.

2. On the line below, and in the left-hand column, enter the first antecedent, which must be of the same denomination as the term of demand, and equal in value to the corresponding consequent placed contiguously in the right-hand column.

3. Similarly make the second antecedent of the same denomination as the preceding consequent, and equal in value to the annexed consequent, and so on throughout, introducing equations according to the nature of the case, and making the terms lead from one to another, so that the last term may be of the same denomination as the answer required.

Then multiply the antecedents together for a divisor, and the consequents, including the term of demand, together for a dividend, and the quotient will be the answer required.

Exampless—Required the price per lb. avortd. of tea purchased in China at 30 tales per pecul of 133] lbs.; 730 tales being equal 1000 dollars, and the rate of exchange 58 pence per dollar?

Arranging these data according to the preceding rules, we have—

1 lb.?

 $1 \times 1 \times 30 \times 1000 \times 58 = \frac{1,740,000}{133\frac{1}{2} \times 1 \times 720 \times 1} = \frac{1,740,000}{96,000} = 18\frac{1}{2}$ pence, the price per lb. required. 133} × 1 × 720 × 1

The operations are in practice simplified by striking out the same numbers when they occur in

CHA 145 CHA

different columns; or when terms in different columns are measured by the same number, by cancelling the original terms, and using the quotients in their stead. Fractions likewise are generally converted into whole numbers by multiplying both terms of the equations in which they occur by the denominator. Thus, multiplying the first equation of the preceding case by 3, we have 400 lbs. = 3 peculis. Calculations of this kind are further facilitated by compounding the invariable terms into one result or fixed number, and applying the variable terms to it as multipliers or divisors, according to the state of the question. Thus, in the preceding case, the invariable terms 133, lbs. = 1 pecul (or its equivalent 400 lbs. = 3 peculs), and 720 tales = 1000 dollars; and collecting these

into one result separately, and using the antecedents as the dividend, we have $\frac{400 \times 720}{1000}$ 3 × 1000

which will therefore form a fixed antecedent or divisor in the above and all analogous cases. In the above case we shall have simply $\frac{30 \times 58}{80} = 18\frac{1}{2}$ as before.

The chain-rule admits of being applied advantageously to a great variety of cases in commercial arithmetic, but it is in questions of exchange that it is chiefly employed. "Foreign merchants," says Dr Kelly, "are generally very expert in their application of this rule to commercial computations; and it is in a great measure to this that their acknowledged superiority in the science of exchange may be attributed." (Cambirt, vol. ii. Introd. p. vi.) [Exchange.]

CHALDER, a corn-measure in the former Scottish system, which contained 16

bolls. [Boll.]
CHALDRON, a heaped measure formerly used for coals, lime, fish, potatoes, and other coarse commodities, but now prohibited (5 & 6 Wm. IV. c. 63); it contained 12 sacks, or 36 heaped Bushells. Also a weight for coals still used in London and the coarse commodities and the latest and the late

12 sacks, or 36 heaped Bushels. Also a weight for coals still used in London and Newcastle; the London chaldron = 25½ cwt.; the Newcastle chaldron of 3 wains = 52½ cwt., but estimated for boats at 53 cwt.

CHALK (Fr. Craie. Ger. Kreide. It. Creta. Por. Creda. Rus. Mjel. Sp. Greda) is a massive opaque carbonate of lime, of a white, grayish, or yellow colour, having an earthy fracture. Sp. gr. 25. It varies much in hardness, but is generally soft to the touch, and adheres to the tongue. It composes a large portion of the newest secondary rocks in the S. of England. When purified by trituration and elutriation, it is called whiting and Spanish white. Its uses are well known in furnishing lime for manure and cement, in polishing metals and glass, as a marking material, and in painting and whitewashing.

Black Chalk is a grayish, or bluish-black kind of clay, of a slaty texture, used both in drawing and painting. It is found in France, Spain, Italy, and Bayrenth. CHAMOMILE, a useful herb (Anthemis nobilis), found plentifully in this country, especially on the commons near London. It is celebrated as a bitter; and an infusion of the flower-heads is much used in medicine. The bitter principle is strongest in the little yellow flowers of the disk, and the wild blossoms are much

strongest in the little yellow flowers of the disk, and the wild blossoms are much stronger than those of the cultivated sort.

A species of chamomile (Anthemis tinotoria) is raised in France for the sake of a brilliant yellow dye which is obtained from it.

CHAMPAGNE. [WINE.]

CHAMPAGNE. [WINE.]

CHAMPAGNE. (WINE.]

CHAMPAGNE. (WINE.)

CHAMPAGNE. (WIN party, one red and the other winte; the latter is of inthe value. Incess and worn on the arms, legs, fingers, and toes by the Hindoos. A third species, opening to the right, is rare, and very highly valued. The demand for these shells, caused by the religious rites of the Hindoos, was formerly so great, that 60,000 rixdollars per annum were received by the government for the right of fishing them; but the demand decreased until the revenue became not worth collecting; and the fishery is now free to all.

CHARCOAL, a well-known impure form of carbon, obtained by the destructive distillation of various organic products; its characters and properties vary with its source. Wood charcoal is commonly made of oak, clesnut, elm, beech, or ash; the white and resinous woods are seldom used, and young trees answer better than large timber. It is a black, brittle, solid substance, easily pulverized, porfectly insipid, and inodorous. Animal charcoal is obtained generally from musele, born, hoof, or similar animal substances. It possesses the same general characters as the former, but often has a peculiar lustre and sponginess, and appears as if it as the former, but often has a peculiar inside and sponginess, and appears as it it had undergone fusion. Charcoal possesses remarkable antiseptic properties. It resists the putrefaction of animal matter; it also destroys the colour and smell of many substances. Common vinegar, by being boiled with it, becomes colourless; and red wines, rum, or brandy, may be bleached by filtration through it. It is largely employed for this purpose in the process of sugar-refining, and other arts. Animal charcoal has been found most efficacious for these purposes. Wood

charcoal is mostly used for fuel, and in the manufacture of gunpowder. (Brande's

Chemistry.)

CHART, a plan or MAP of a sea or coast, constructed for the purpose of asceraining the position of a ship with reference to the land, and of shaping a course
o any place. "The charts used in navigation are those on Mercator's projection,

aning the position of a ship with reference to the land, and of shaping a course of any place. "The charts used in navigation are those on Mercator's projection, because on this alone the track of a ship always steering the same course appears a straight line; and thus all calculations respecting the latitude and longitude of a ship steering a course which cuts all the meridians at the same angle, are reduced to the utmost simplicity." (Raper's Navigation.)

CHARTER PARTY, a branch of the contract of affreightment, is defined a contract, "by which an entire ship, or some principal part thereof, is let to a merchant for the conveyance of goods, on a determined voyage to one or more places" (Abbot, 162). It is executed by a deed duly written on a stamp, generally containing specification of the ship and her burden, the amount of freight, the limitation of the agreement by time or voyage, and the time of loading and unloading. The amount of demurrage is generally fixed. [Demurrage] In England, the execution of a charter-party by the master, though said to be done on behalf of the owners, does not furnish ground for a direct action against them, founded on the instrument. "This depends," says Mr Abbot, "upon a technical rule of the law of England, applicable as well to this as to other cases, and not affected by the mercantile practice of executing deeds for and in the name of absent persons; the rule of the law of England being, that the force and effect which that law gives to a deed under seal, cannot exist, unless the deed be executed by the party himself, or by another for him in his presence and with his direction, or in his absence by an agent authorized to do so by another deed; and in every such case, the deed must be made and executed in the name of the principal." By another technicality, if the agreement bear to be between particular parties, owners of a ship, whereof a certain person named is master, on the one side, and certain persons named, on the other, the master cannot bring an action his insame side, and certain persons named, on the other, the master cannot bring an action in his name upon the covenants, nor give a release for them, though he seals and delivers the instrument. If, however, the covenants on the side of the owners bear to be by the master, with their consent, the owners can bring an action for fulfilment, though, unless they seal the deed, they cannot be sued (Abbot, 166). "In Scotland," says Professor Bell, "the charter-party is not trammelled by those technical rules though, unless they seal the deed, they cannot be sued (Abbot, 166). "In Scotland," says Professor Bell, "the charter-party is not trammelled by those technical rules which, to a stranger, appear to oppose so many bars to the efficacy of the contract, secording to the jurisprudence of England. The contract, when duly executed by the owners or by the shipshusband, or by the master within the limits of his powers, is binding on the owners, and gives action direct in the Court of Admiralty [now in the Court of Session] against all concerned. It also, in general, contains a registration clause, in virtue of which it may be the ground of summary execution, without any necessity for a previous action." (Bell's Com. i. 539.)

The most important questions regarding charter-parties generally relate to the risks and responsibilities of parties arising out of the usual perils of the sea; compensation or damage for delays, alterations of the agreement, &c. Information on these subjects will be found under the heads Affrequently, Bill of Lading, Demurage, and Shipping. (Abbot and Bell, ut supra. Smith's Meroantile L. 240-243.)

CHATTELS, one CATALS, in the law of England, is an expression used to designate any description of property, moveable or immovable, except such as is, in its nature, freehold, or parcel of it. Chattels are either personal or real. Of the former, are shop goods and wares, household furniture and plate, corn sown, cattle, &c. Chattels real are such as are said to savour of the reality, i. e. which either are landed property or some continuous right issuing out of it, as terms for years of land, the next presentation to a church, &c. (Jacob's Law Dictionary.)

CHAYA-ROOT, a small slender root, yielding a scarlet dye, obtained from a plant (Oldenlandia umbellata), cultivated on the coasts of Coromandel and Malabar, and in Ceylon. In that island it was once monopolized by the government, but the monopoly has been relinquished. The colouring principle exists only in the bark. It is used in India to paint t

bark. It is used in linua to paint the red ingures on chinas, etc., our is not essentially the dyers in this country.

CHECK. [Cheque.]

CHECK, a kind of cloth in which coloured stripes cross each other rectangularly. In this country, the checks chiefly manufactured are of a very coarse kind, suited for seamen's shirts, aprons, and common bed-gowns. The two principal seats of the trade are Blackburn and Kirkcaldy, the former in cotton, the latter, till of late, the line of Driverse 1 chiefly in linen. [PULLICATES.]

CHEESE (Du. Kass. Fr. Promage. Ger. Küss. It. Formaggio, Cacio. Por Queijo. Rus. Sür. Sp. Queso), a species of food which consists of the caseous matter of milk, united to a certain portion of the cily or creamy part, which last adds to the flavour and richness of the cheese. Cheese, however, can be made from milk from which the cream has been removed, and it is then termed skimmed milk cheese. It may even be made from buttermilk; but then the creamy part being more withdrawn than in the case of skimmed milk, the cheese wants still more the properties and flavour which are valued. The poorer the cheese is the longer it will keep; but every variety, if well cleared from whey and sufficiently salted, may be preserved for years.

Cheese is made in large quantities in the dairy counties of England, particularly in Cheshire (where the annual produce is about 11,500 tons). Gloucestershire.

in Cheshire (where the annual produce is about 11,500 tons), Gloucestershire, and Warwick. "Single Gloucester" is made from skimmed milk, "Double Gloucester" from unskimmed,—the best being from the vale of Berkeley. The Wiltshire is equal to the best double Gloucester. The celebrated Chedder and Bridgewater cheeses are made in Somersetshire; though a somewhat inferior Chedder is The cheeses known by the name of Stilton, which often sold as double Gloucester. are chiefly made in Leicestershire, and those of Banbury in Oxfordshire, are of are chiefly made in Leicestershire, and those of Banbury in Oxfordshire, are of superior richness; the former is made by adding the cream of the preceding evening's milk to the morning's milking. Scotland produces little good cheese, except that called "Dunlop," made in Ayrshire and the adjoining counties of Wigtown and Kirkcudbright; the most esteemed is the Wigtown Dunlop. In Ireland only a small quantity is made, and that too of an inferior quality. The most celebrated foreign cheeses are the Parmesan, a skim-milk cheese chiefly from Lodi in Italy; the Gruyere, from Switzerland, entirely of new milk; the Roquefort, of ewes' milk; and the Neufchatel, made of cream, thickened by heat; the last, a small cheese folded in paper, is imported as a delicacy from France. The foreign cheeses principally used in this country, however, are those from Gouda and Edam in Holland; of these the former is the finest, but the latter keeps longest, and consequently forms an important article in the victualling of ships.

Cheeses are frequently coloured with annatto, the juice of the orange carrot, or the flower of marigold, from the notion that a yellowish tint makes the look richer; Gloucester and Wiltshire cheeses are coloured deeply; Cheshires lightly; but Chedder, Stilton, and some other rich cheeses are never coloured.

but Chedder, Stilton, and some other rich cheeses are never coloured.

Very little cheese is exported, but the quantity imported is considerable, being about 220,000 cwts., which, with the exception of about 1000 cwts. from Italy,

France, and Germany, is brought exclusively from Holland.

CHEQUE is a written order on a banker by a person having money in the banker's hands, directing him to pay on presentment, or to bearer, or to a person named, a certain sum of money. Cheques partake of the nature of bills of exchange, in their indorability as the representative of cash. The cheque, till lately, being exempt from the stamp laws, was limited in its operation, so as to prevent it from performing the functions of a bill of exchange, and, being either a means of raising a credit, or an instrument by which a creditor at a distance from his debtor can convert the debt into a negotiable obligation. But by the act of 1853, the 16 & 17 Vict. c. 59, cheques are made liable to the uniform penny receipt stamp, it drawn payable to bearer or to order on demand. The place of issue must be drawn payable to bearer or to order on demand. The place of issue must be named, and the order must bear date on the day of issue, and must not direct payment to be made by bills or promissory notes (9 Geo. IV. c. 49, § 15. Sched. of 55 Geo. III. c. 184). These rules must be strictly observed. Where a person residing in a private house four miles from a town, dated a cheque drawn there as if drawn in the town, it was held unavailable for want of a stamp (Waters v. Brogden. I. Foung & Jew. 457). Cheques are exempted by 7 Geo. IV. c. 6, § 9, from the provision which prohibits bills under £5 from being negotiated in England except under certain restrictions. It is held that, in the ordinary course of business, a cheque cannot be negotiated so as to affect the drawer (e. g. in the case of the banker becoming insolvent), after banking hours of the day on which it was issued, but where the drawer is himself instrumental to the delay, he may continue liable to any onerous bolder. It is the duty of the person receiving a cheque, whether from the drawer or an indorser, to present it for payment on the day on which he receives it, if it come to his hands early in the day, and otherwise on the day following; if he be at a distance, he should deepatch it within the same time, if the Post Office arrangements admit of his doing so. Legal rules on these points cannot, however, be strictly laid down, and the above statements must be held as of a merely precautionary nature. A banker refusing to honour a cheque when he is in funds

to the drawer, is liable in damages; but he is entitled to act on his own discretion where there are grounds to suspect forgery or fraud. [BILL OF EXCHANGE.]

CHEQUEE, a small Turkish weight. The chequee used in weighing gold, silver, and precious stones, contains 100 dirhems or drams, and is equal 4950 troy grains; but the chequee for gost-wool contains 800 drams, and that for opinu 250 drams. CHERRY, the well-known fruit of a tree (Cerasus), of which the Horticultural Society's Catalogue enumerates about 220 varieties. The cherry orchards of Kent are celebrated. The wood of the tree is close, takes a fine polish, and some sorts are adapted for tool-handles and cabinet-work. are adapted for tool-handles and cabinet-work.

"Several liqueurs are manufactured from cherrics. A large black cherry is used in the composi-tion of the Rainfla of Grenoble; and the Maraschine of Zara is prepared from a particular species of cherry cultivated in Dalmatis. Kirschwauser, which is a cheap spirit, forming a considerable article of commerce, is the fermented lique of a small black cherry." (Vog. Substances, l. p. 341.)

CHESNUT, SWEET OR SPANISH (Fr. Chataignes. It. Castagne. Sp. Castanas), CHESNUT, SWEET OR SPANISH (Fr. Chitaignes. It. Castagne. Sp. Castanas), is a dark-brown, ovate, sharp-pointed nut, or cost, containing a nutritive starchy kernel, of a sweet flavour, which is extensively used as food, either raw, roasted, ground, or otherwise prepared, in Italy, Spain, and the S. of France, where the tree (Castanes esca) chiefly abounds. It is used in this country in a roasted state at desserts. The quantity annually imported fluctuates from 15,000 to 30,000 bushels. The sweet chesnut is grown in several parts of England, but the fruit is of an inferior kind. The tree in a wild state sometimes attains an extraordinary size:

On Eins there is one called the hundred-hoyes chesnut from its being able to

On Ætna there is one called the hundred-horse chesnut, from its being able to contain 100 mounted men in its hollow. The timber is considered to be of equal

value to that of the oak, and is applied to the same purposes.

Hobse Chesnur (*Esculus*) is a handsome tree, much used for ornamental purposes in this country, but as it is soft and spongy, its value is limited.

CHETWERT, or TCHETVERT, the principal Russian corn-measure, equal

poses in this country, but as it is soft and spongy, its value is limited.

CHETWERT, or TCHETVERT, the principal Russian corn-measure, equal 5½ Imp. bushels nearly.

CHICA, a plant (Bignonis chica), growing on the banks of the Orinoco, from the leaves of which an orange dye is extracted. It is occasionally to be met within the form of round cakes. In America it is used by the Indian tribes to stain their skins.

CHICORY, or SUCCORY, is a hardy perennial plant (Cichorium intybus); found either in a wild or cultivated state in most parts of Europe. It has a strong and fleshy root, which when young is celebrated for its use as a substitute for coffee,—a purpose for which Dr Duncan thought it might be advantageously cultivated in this country. Its preparation consists merely in being cut into pieces, dried, and ground. The substitution of chicory for coffee was greatly encouraged by Bonaparte, in order to harass the trade of England; and the root is still thus used in many parts of Germany, Holland, and Switzerland. In this country it is well known to be extensively employed in the adulteration of coffee. S

CHILLIES are long roundish taper pods, obtained from a shrubby plant (Capsicum frutescens), cultivated extensively in the East Indies. The pods are filled with a dry loose pulp, and contain many small, flat, kidney-shaped seeds. Their taste is extremely pungent and flery; their colour when ripe is a bright orange red. They are occasionally imported dry, and are used as a condiment. They form the basis of Cayenne pepper and curry powder. The fresh capeicums used in Europe are chiefly procured from a species (C. annuum) found wild in the W. Indies and S. America.

CHILLI, a narrow country extending nearly 1200 miles along the W. coast of

CHILI, a narrow country extending nearly 1200 miles along the W. coast of S. America, betwixt lat. 25° and 44° S. It is bounded N. by Peru, E. by the Argentine Republic, S. by Patagonia, and W. by the Pacific. Area, including the Archipelago of Chiloë, but excluding the portion of Patagonia claimed by Chili, 130,000 sq.miles. Population 1,200,000, chiefly Spanish-Americans and Indians. It is divided into eight provinces. Capital, Santiago, a handsome inland city; pop. 60,000. The government has a republican form; the legislature consists of a senate and house of representatives; and the executive power is vested in the hands of a supreme director.

hands of a supreme director.

The lofty chain of the Andes runs along the whole eastern boundary of Chili, and the country below is composed, to a considerable extent, of valleys, surrounded by high mountains or ridges. The climate varies much in the different districts, but it is every where salubrious, and in the central provinces is similar to that of Italy. Rain occurs seldom except between May and August. Spring begins in September, and the hotiest months are January and February. The northern provinces are in general dry and steril, destitute of wood, but rich in minerals. On the other hand, the southern provinces are humid, highly fertile, and abound in fine timber, but are much less rich in minerals. The chief metallic productions of Chili are guid, silver, and copper, but the steril condition of the provinces in which they are principally found prevents them being worked except where very rich. Gold is obtained both from the sand of the rivers and from mines; the total

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quantity in 1834 is stated, in a late consular return, at 3855 marcs; but no dependence can be placed on the accuracy of this report, as it he metal is mostly exported in a clandestthe manner to avoid the export duty, which is 4 per cent. ad estloren. The silver mines exist chiefly in a faint of the proper mines are careedingly numbers of the consular return, at 164,935 marcs. The copper mines are exceedingly numbers on sever discovered shoul sity rules in a considerable of the consular return, at 164,935 marcs. The copper mines are exceedingly numbers on the cities of Copiapo and Copiap

²² Son of Heaven," and absolute lord not only of China, but of the world. A peculiar character, however, is given to the constitution, by a provision for securing intelligent functionaries in the different branches of administration. These must be persons elevated to the dignity of quens or mandarins, by their proficiency in learning. The highest class reside at the capital, as state councillors, public consors, or as members of the six pous or boards, to whom are confided the different branches of administration; and from the other classes are chosen provincial governors and subordinate officers.

sora, or as members of the six pous or boards, to whom are confided the different branches of administration; and from the other classes are chosen provincial governors and subordinate officers.

Chinese Tartary and Thiest are comparatively thinly peopled territories, inhabited by wandering and semi-barbarous tribes, who are held as tributaries, or under loose military government, without any attempt to impose on them the laws and general character of China itself. The source of the vast wealth of the state is to be found in China Proper, the local features of which are understood to possess the same character of vastness which generally distinguishes the empire. Her provinces equal our kingdoms, her towns our capitals, her villages most of our cities; yet all these are pervaded by a certain sameness approaching to monotony. The number of provinces are pervaded by a certain sameness approaching to monotony. The number of provinces last, according to their importance, are sarranged in three classes, generally appressed by the terms fow, tokeos, and kies annexed to their names; as, Kai-fong-fou, Lam-Cheose, Yesse-Mers. The sorthern, central, southern, and western provinces possess each peculiar and distinctive characters.

1. The Northern Provinces, Pechelee, Shan-tung, and Shan-se, consist of very extensive plains, rising on the N. and W. into mountains or high suble-lange to the forms to every decivity of the high ground in the comparison of the constitute of the same latitude; so that all the rivers, not excepting the high grounds were somewhat of a pastoral aspect, and support several domestic animals, which high grounds were somewhat of a pastoral aspect, and support several domestic animals, which have been banished from the more cultivated provinces. The fine manufactures that distinguish and other varieties of beautifully coloured stone. This district contains the capital, Petin high productions, all its finest fabrics, are here read of two paralles brick walls, which as anciently excelled. The mineral pr

Incess porcessing that.

The other provinces in this district are less distinguished for their productions, whether natural or artificial.

3. The Southern Provinces are composed of Quang-tung, or Canton, Po-kien, and Quang-see. These consist of the level country intervening between the sea and the extensive mountain-chain which is prolonged from the Himmaleh, along the whole south of China, with an elevation diminishing in its progress eastward, and which forms a steep barrier separating them from the rest of the empire. High ranges also shoot across them, and terminate in rugged cliffs. In the intervals, however, are many valleys, and even extensive plains, that rival the finest of the central provinces, and are cultivated with equal diligence, though they yield no very valuable productions, except the bohea tea, rearred chiefly on the hill-slopes of Fo-kien. The manufactures are various and actively pursued, yet none of them can match those of Nan-king, Hang-tcheou-fou, and King-te-tching. The coast, however, is the seat of nearly all the foreign trade of the empire. It a position relative to the eastern peninsula and archipelago, its fine harbours, even the ruggedness of many of its districts, seem to have united in turning the industry of the people into this direction. Canton is the well-known seat of the trade with Europeans and their possessions in India; while the Chinese junks sent to the neighbouring coasts and islands are almost all fitted out from the ports of Fo-kien. A boider and more enterprising race, addicted to martime adventure and even to emigration, inhabits these shores.

4. The Western Provinces bordering on Tartary are Shen-see, Kan-su, Se-tchuen, Koei-tcheou, and Yun-nan, but our knowledge of them is more imperfect than of any other quarter. Ac-

criting to every description hitherto received, their aspect, productions, and social state differ very widely from those of the other parts of the support. The monumban are much infilter; and their recesses are occupied to a great extent by the Mino-tess. Loke, and other independent and almost aways tribes. This region, however, is not altopulste sterior of unproductive; these are some aways tribes. This region, however, is not altopulste sterior of unproductive; these are some acceptance of notate and minerals is particularly ample, including gold, silver, and copper. On the little of some districts are reharbar and other modicinal plants; and among the numerous wild animals is the one which yields musts. The rivers afford commodious channels for transporting these articles of the principal, Formous, being on the west, and Hainan on the south. The former is mountainous, and hashited by barbarians, apparently of Polynesken origin. The latter is considerable, and is occupied in the interior by rude nadres, and on the coast by the Chinese, rearing productions. The Chinese have been represented as averse to all straffic; but more accurate information seems to establish the fact that no people are more solicitous to acquire riches, or less fastidious as to the mean; and that the wealthy class are as desirous as in any other land to procure whatever appears to them methal or agreeable, without any terroption inquiry so to how or whence it comes. The variety of climate and productions throughout the empire readers the provinces mutually dependent upon each other, and affords ample scope for exchange; while the traffic is minerased by the decrumations that the court, and with it the great body of opiniest families, is related to the principal provinces mutually dependent upon each other, and affords ample scope for exchange; while the traffic is related to the principal provinces in the principal provinces mutually dependent upon each other, and affords ample scope for exchange; while the traffic is related to the pr

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tand, as do all the Tartur metibus, who have acquired a great relish for this article. The commodity part in importance is raw ellk, which is raised and manufactured in the provinces of Ekang-sam or Neshen, Tebe-kiang, and Quang-tung obt; and the first is generally doubt its value of the last. There was all the province of Ekang-sam or Nun-ting, and of Quang-tung only; and the first is generally doubt its value of the last. There was a contracted on the contract of the cont

	Ben	lle).	Mad	ree,	3	bay.	Total.		
Years.	Merchanlise	Tresure.	Merchandise	Treasure.	Merchandi e	Treasure.	Morobacdiso	Transure.	
	£	£	£	£	£	£	£	£	
1832-1833	1,180,830	3,200	33,103	• • • •	1,489,989	••	2,703,222	3,200	
1833-1834	1,323, 85		34,411	670	2,205,942	••	3,564,038	4,413	
1834-1885	[1,270,770]	1,125	40,484		1,560,855	• •	2,872,109	1,125	
1835-1836	2,019,183	2,295	172,234	1,312	2,245,674	880	4,437,091	4,487	
1836-1837	1,912,172	3,392	270.063	1,519	3,266 625	880	5,448,860	5,791	

EXPORTS FROM CHINA TO INDIA.

	Ben	gal.	Mad	728.	Bom	hay.	Total,		
Years.	Merchandisc	Treasure.	Merchandise	Treasure.	Merchandise	Treasure.	Merchandise	Treasure.	
1832-1833	£ 93,944	£ 221,243	£ 26,138	£ 604	£ 333,230	£ 353,834	£ 453,312	£ 575,68	
1833-1834	100,817	375,859	10,531		430,611	907,846	541,959	1,283,70	
1834-1835 1835-1836		329,033 329,480	37,787 12,887	2,146	358,353 457,572	855,923 956,728		1,185,65	
1836-1837	107,506	233,167	17,471		400,567	1,007,428	525,544	1,240,50	

1835-1835. 193. 393. 382.033 | 37.727 | 700 | 336, 333 | 155, 323 | 515, 323 | 118, 362 | 1835-1837 | 107, 306 | 329, 457 | 17, 471 | 47, 572 | 440, 567 | 1, 907, 483 | 325, 544 | 1, 240, 302 | 1835-1837 | 107, 506 | 233, 167 | 17, 471 | 47, 572 | 440, 567 | 1, 907, 483 | 325, 544 | 1, 240, 302 | 1835-1837 | 107, 506 | 233, 167 | 17, 471 | 47, 572 | 440, 567 | 1, 907, 483 | 325, 544 | 1, 240, 302 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 | 1835-1837 |

CAPTOR, or QUARTE-TURBOU-FOUR, the emporism of the foreign trade, is seated in lat. 23° 7' N., long. 113° 14' E., on the N. side of the Choo-kian; or Canton river, 80 miles distant from the open sea. Vessels in the regular trade proceed first to Macso [Macao], at the entrance to the estimary, where they are reported to a Chinese officer, who, on receiving satisfactory answers to his quiries, grants a permit for them to pass through the Boque (or mouth of the river). They then proceed upwards to Whampoa, the shipping station, altered about 14 miles below Canton. The city is walled.

The city is walled.

Express are not admitted within the gates; their business in a propagation of the city is walled. The city is walled to the city of the city is walled. The city is walled to the city of the city is walled to the city of the city is walled. The city is walled to the city of the city is an interest of the city is walled to the city of the conduct of the crew. These merchants never healtists to undertake the responsibility for any sight that offers; and although the law declares that foreigners shall trade with them only, this is evaded by the perchase of a small quantity of goods from one of their number, and, under a sort of license from him, a traffic is then openly carried on with the outside servicants, or natives generally. Shipmaster are required to declare that they have brought no optim.

Trade is conducted with punctuality and despatch. The number of foreign merchants is about 100, mostly Britah, or Americans, with a relation of the conductive of the conductive city of the city of t

would be worth about 6a. 6d.; but it is commonly valued among foreign merchants according to from the measurement charge; also from the its rate of exchange for dollars. In converting the state of account into dollars. In converting the state of account into dollars. In converting the merchants of account into dollars. In converting the state of account into dollars. In converting the state of account into dollars. The state of the state of dollar silver about 5a. 100. The heaviness of the port charges, particularly on small vessels (the cumshaw being the same value of the tacle of dollar silver about 5a. 100. The shore resident into 100 equal parts tood to contain 94 parts of pure metal and 6 or alloy. The space silver used in ingots, as a substitute for money, is never perfectly pure; in commerce it is seldom found above 95 touch. That received of late years for optium at Linin has been found to contain a considerable admirture of gold, which has enhanced its value.

Remittances to China may be made either direct or in bills on Calcutta, Madras, or Bombay, to be sold in Canton. At Canton, bills on London are drawn at 6 months sight, the usual rate being about 4a. 10d, per dollar.

In the preceding article, we have confined our attention to the course of trade as it existed prior

In the preceding article, we have confined our attention to the course of trade as it existed prior to the seisure of the Britiah superintendent, Captain Elliot, by Commissioner Lin, in April 1839. A narrative of the hostile operations which followed that event would be out of place here; but For other details we refer to the articles Ofium and Tha, and China in the Supplement.

CHINA-ROOT, a large tuberose knotty root, of a dark reddish-brown colour on the outside and reddish-white within, produced by a species of smilax (Smilass China). It was formerly imported from China, and employed in medicine, but of late years it has been much neglected by European practitioners. Various species of smilax are common in Jamaica, where the root is in great repute, and held equal in quality to the oriental kind. (Ainslie's Mat. Indica.)

CHINCHILLA, a little quadruped(Chinchilla lanigera) celebrated for the beauty of its fur, which exceeds in warmth and softness that of any other animal, and has long been known as an expensive and useful article in the dress of ladies. The fur, or rather wool, is of an sah-gray colour, and sufficiently long for spinning. In length, the creature is six inches from the nose to the root of the tail, with small pointed ears, a short muzzle, teeth like the house-rat, and a tail of moderate length. It belongs to the Rodensia, or gnawing animals, and lives in burrows under ground, in the open country, in the northern provinces of Chili. [Fur.]

CHINTZ (Du. Sits. Fr. Indiennes. Ger. Zitse. It. Indians. Por. Chitas. Rus. Six. Sps. Chites, Zarasa), a peculiar style of fast-printed calico, in which figures of many different colours are impressed upon a white or light-coloured ground.

CHLORATE, OR OXYMURIATE OF POTASH, an interesting compound of chloric acid and potash, which, when strongly triturated, crackles, throws out sparks, and becomes luminous. It is extensively manufactured in consequence of its use in the preparation of light-matches, and a detonating priming for firearms

sparks, and becomes luminous. It is extensively manufactured in consequence of its use in the preparation of light-matches, and a detonating priming for firearms having percussion-locks.

CHLORIDE OF LIME, or BLEACHING POWDER, is prepared by passing chlorine into chambers containing fresh slacked lime in fine powder, by which the gas is copiously absorbed, with extrication of heat. It is a dry white powder, possessing a faint odour of chlorine, and a strong penetrating taste. When agitated with water, a portion is dissolved; and the solution, called bleaching liquor, contains both chlorine and lime. This compound is extensively used as a bleaching material. Its power for this purpose, and consequently its commercial value, may be estimated by its action upon a solution of indigo of known strength (Ann. of Phil. xxiv. 218). The composition of bleaching-powder is variously stated. "A specimen of chloride of lime of the best quality usually sold in London, consisted of 1 equivalent of chlorine, 2 of lime, and 2 of water" (Brande's Chemistry). Chloride of lime is also used for fumigation, from its possessing the property, when exposed to air, of checking contagion or destroying noxious effluvis.

CHLORIDES OF POTASH AND SODA.—These compounds likewise possess bleaching properties, but the price of the alkalis has led to their being superseded for general purposes by the chloride of lime, though they are still used by some bleachers and calico-printers for their more delicate processes. The chloride of soda is also employed as a substitute for ashes in various manufactures.

CHLORINE, the most energetic of the chemical elements, is obtained by the action of muristic acid on peroxide of manganese. When pure, it is a greenish-yellow coloured gas, which has an astringent taste, a peculiar, disagreeable odour, and violently irritates the nostrils, windpipe, and lungs, when inhaled. The solution, which is made by transmitting a current of chlorine gas through cold water, has the colour, taste, and most of the other proper

contagious matter and or dad odours; and nence forms an important ingrounds in many useful substances.

CHOCOLATE (Fr. Chocolat. Ger. Schokolats. It. Cioccolata. Por. & Sp. Chocolate), a kind of paste or cake, chiefly prepared with the triturated cocoa-nut (Theobroma cacae) after having been reasted, and other ingredients, the chief of which are sugar, vanilla, and a little cinnamon. It abounds with nutritive matter, but contains an oil which is of difficult digestion. A small quantity only is used in this canaly which is nearly all of Parities manufacture. Exerciners generally prefer

this country, which is nearly all of British manufacture. Foreigners generally prefer the Spanish chocolate, but ours is made with more care, and is less oily.

CHOSE IN ACTION, an English law term, denoting that kind of property of which the owner is not in the actual occupation, though he has a legal right en-

titling him to obtain the possession by a suit.

CHROMIUM, a metal resembling iron in colour, brittle, and difficult of fusion.

Sp. gr. 5.9. It is rarely to be found in its metallic state, but several of its compounds are used in the arts. In commerce, it chiefly occurs in the forms of chromate of iron and chromate of lead.

CHROMATE OF IRON, a compound of oxide of chrome with protoxide of iron, is

found in Unst in Shetland, in France, and near Baltimore in America. It occurs massive, and in octahedral crystals of a blackish colour, and imperfect metallic lustre. Sp. gr. 4.3. It is used in the manufacture of chromate of potash. Chromate of Lead, or Red Lead, is found native in the gold mines of Berezof in Siberia, in the Ural Mountains, and in Brazil, and is easily prepared by mixing chromate of potash with a soluble salt of lead. It occurs massive and crystallized; colour deep crange, and it is a mirable of the property of the pr

chromate of potash with a soluble sait of lead. It occurs massive and crystalized; colour desp orange-red; when pulverized, orange-yellow. Sp. gr. 6. It is a valuable pigment, and is used both in oil and water colours, in calico-printing, and in dyeing. Chromate of Potash is a sait of a bitter disagreeable taste; crystals yellow. Sp. gr. 26. The Bi-chromate of potash is prepared from the chromate; it has a bitter penetrating metallic taste. Sp. gr. 198. This sait is largely manufactured in Glasgow, for the use of calico-printers.

The other companyed chiefly in use are the Oxide of Chromisum employed to give

in Glasgow, for the use of calico-printers.

The other compounds chiefly in use are the Oxide of Chromium, employed to give a green colour to glass and to porcelain, and Chromic Acid, which, from its property of destroying most vegetable and animal colouring matters, is advantageously employed in calico-printing.

CHRONOMETER. [WATCH.]

CHRYSOBERYL, a gem much prized when transparent and free from flaws. Its colour is green, sometimes with a yellow or brownish tinge, and occasionally presenting internally an opalescent blueish-white light. It occurs crystallized, and in rolled fragments. Sp. gr. 37. Localities, Connecticut, Ceylon, and Brazil from whence the finest specimens are procured. (Phillips.)

CHRYSOLITE, an ornamental stone of a bright yellow colour, sometimes tinged with green or brown: transparent or translucent: and possessing double the power

with green or brown; transparent or translucent; and possessing double the power of refraction. It is found in angular, or somewhat rounded crystalline masses, and in prismatic crystals. Sp. gr. 3-4. The best specimens are brought from Egypt. CHRYSOPRASE is a rare pale-green calcedony, found in Upper Silesia and Vermont, which owes its colour to the presence of nickel. It loses the delicacy of its original hue by being much handled or worn as an ornament: it is, however, much prized by iswellers and purally out into a convex form.

its original hue by being much handled or worn as an ornament: it is, however, much prized by jewellers, and usually cut into a convex form. CHUNAM, in oriental commerce, is quicklime made from calcined shells. CIDER (Fr. Cidre. Ger. Zider., Apfelwein), the wine of the apple, is made in large quantities in the English "cider counties," which lie something in the form of a horse-shoe around the Bristol Channel. The best are Worcester and Hereford on the N., and Somerset and Devon on the S. In Ireland, it is made of good quality in the counties of Waterford and Cork. Generally speaking, those apples that are considerably astringent, and are unfit for the table or cullnary purposes, make the best cider. From 24 to 30 bushels of fruit are required to make a hogshead, the price of which varies from £2 to £5, according to season and quality. The harvest is in September, but the liquor is not fit for sale until March; it improves by keeping. Cider is made in Germany, Belgium, and Normandy; and in the United States it may be considered as the common beverage of the great body of the people, except in large towns.

An annual license to retail cider in England is granted by the Excise, on an application similar

An annual license to retail cider in England is granted by the Excise, on an application similar to that required for a beer license [BEER], the payment being £3, 3a, if the liquor is to be drunk on the premises; £1, la, if it is not (4 & 5 Wm. IV. c. 85), and 3 & 4 Vict. c. 61). The duty of 10s. a-barrel on cider was repealed in 1830.

CINCHONA. [PERUVIAN BARK.]
CINNABAR (Fr. Cinnabre. Ger. Zinnober. Sp. Cinabrio. It. Cinabro), a mineral ore, consisting of mercury combined with sulphur, from which quicksilver is generally obtained by distillation. A similar compound, prepared artificially and powdered, forms the pigment termed Vermillon.

CINNAMON (Du. Kaneel. Fr. Cannelle. Ger. Zimmet, Kaneel. It. Canella.

Sp. Canela. Por. Canella), a valuable aromatic bark obtained from a small tree, a species of Cinnamomum, found in Ceylon. The tree is seldom peeled before the ninth year, and the proper time is from May to October. After the bark is removed, it is firmly bound up for about 24 hours, during which time it undergoes a kind of fermentation, which facilitates the separation of the outer bark from the endeating and green matter. kind of fermentation, which facilitates the separation of the outer bark from the epidermis and green matter under it, which are carefully scraped off the Ceylon cinnamon. The substance then speedily dries, contracts, and assumes a quilled or pipe appearance. These pieces or quills are inserted into each other, the smaller being surrounded by larger ones. It is then carefully examined, sorted, put up into bundles, and wrapped in double cloths made of hemp. The interstices between the bales are filled with black pepper, a mode of packing originally practised by the Dutch, and scrupulously adhered to by the English, as it is said to improve both spices. The best Ceylon cinnamon occurs in pieces about 40 inches long, each containing from six to eight quills or rolls. It is of a light yellow colour, nearly as thin as paper, smooth, shining, admits of a considerable degree of bending before it breaks, fracture splintery, has a pleasant warm aromatic flavour, slightly astringent, with a mild degree of sweetness. When chewed, the pieces become soft, and seem to melt in the mouth. Other varieties of cinnamon found in trade are coarser and thicker, and are not so pungent and sweet. The ordinary uses of cinnamon as a spice for seasoning, are well known. It is, besides, an article of the materia medica, but is chiefly employed as an accompaniment to other medicinas other medicines

Cinnamon and cassia differ from each other in little except the degree in which the aromatic principle exists in them. There are many contradictory statements as to the species of Cinnamonum from which they are obtained. According to the as to the species of transmomentarium mean they are obtained. According to the most recent authorities, cinnamon is obtained from two distinct species, but it is altogether uncertain which out of several yields cassia. The best cinnamon is procured from the C. Zeylanicum (Blume) indigenous only to Ceylon, but cultivated in Java, Brazil, Guiana, and elsewhere; and that of China is said to be the produce of the C. Aromaticum of Nees Von Esenbeck.

Cinnamon is often adulterated with cassia or cassia-ligues, but the latter may be easily distinguished by its fracture being smooth, and by its alimy mucilaginous taste, without any of the roughness of true cinnamon. It is also sometimes mixed with portions which have been deprived of their essential oil,—a fraud which can

with portions which have been deprived or their essential oil,—a fraud which can only be distinguished by the weaker smell and taste.

Europe is supplied with this article almost wholly from Ceylon, of which it forms a staple export. It was formerly the subject of a monopoly, but though this is abolished, it is still liable to the excessive export duty of Sa. per lb., levied by the local government. As cassia lignea, however, can now, since the opening of the China trade, be obtained at Canton for about 3d. per lb., this cheap commodity is substituting itself, for many purposes, for the superior cinnamon of Ceylon. The amount of the latter annually imported averages about 500,000 lbs. The annual consumption in this country at present is, however, only about 16,000 lbs. The consumption in this country at present is, however, only about 16,000 lbs. The surplus imported is re-exported chiefly to Germany, Holland, Belgium, France, Spain, Italy, West Indies, United States, and Mexico.

In the London market three qualities of cinnamon are distinguished, the price of which ries at present (April 1862) from 9d. to 2a. 3d. per lb.

A bale of cinnamon weighs 92½ lbs. avoirdupois.

CINAMON-OIL, one of the most powerful stimulants in the materia medica, is generally prepared from the coarsest part of the bark, by maceration in sea-water, and then distilling with a slow fire. The finest has the flavour of cinamon, and the inferior a considerable mixture of the clove taste. It is sometimes adulterated

with the oils of cassia, cherry laurel, or bitter almonds.

CINNAMON-STONE, a precious stone of a red colour, with occasionally a brown or orange-yellow tinge; translucent, rarely transparent, lustre resinces. Sp. gr. 3.5. It is commonly found in masses, which are full of fissures, and rarely in a state fit for cutting. Chief localities, Ceylon and Brazil.

CINQUE PORTS, a Norman term applied to the towns of Sandwich, Dever, Hythe, Romaey, and Hastings, which were severed by William I. from the administration of the counties to which they belonged and greated into a kind of

Hythe, Romaey, and Hastings, which were severed by William I. from the administration of the counties to which they belonged, and erected into a kind of palatine jurisdiction, with the view of securing his communications with the Continent, and rendering this maritime line one of the grand outworks of the Conquest. They were invested with valuable privileges, and placed under the constable of Dover Castle, with the title of Lord Warden of the Cinque Perts. To the five original ports were afterwards added, Winchelsea and Rye, and twenty-one subordinate ports or members,—the jurisdiction of the whole collectively extending from Birchington, near Margate, in Kent, to Seaford in Sussex. Theorems and Municipal Reform Acts; but the warden still possesses an admiralty jurisdiction, with the execution of writs and custody of debtors.

CIRCULATING MEDIUM, a term applied to "all instruments of interchange by which the productions and the revenues of the country are distributed; every thing which serves and is received as a mode of payment, or which constitutes the nominal money-price which appears in price-currents." (Mr Tooke's Evidence, Par. Report on Banks of Issue, 1840; Q. 3285.)

CIRCULATION is the amount of such currency in use. When the term is used in reference to a bank, it means the amount of its paper issues.

reference to a bank, it means the amount of its paper issues.

CITRIC ACID is obtained by a chemical process from lemon or lime juice. It forms beautiful crystals, of which the primary figure is a right rhombic prism. They have a sour taste, and are soluble in somewhat less than their own weight of cold and half their weight of boiling water. They also dissolve in alcohol. The average proportion of citric acid afforded by a gallon of good lemon juice is about 8 oz. This acid is prepared by a few manufacturers upon an extensive scale. It is employed by calico printers; while in the form of lime juice it is used as an acidulous drink, and in preventing sourvy. With salifiable bases it forms salts called citrates, which are applied to various purposes. (Brande's Chemistry.)

CITRON (Fr. Citronat verd. Ger. Succade. It. Confetti di cedro. Sp. Acitron verde), the fruit of the Citrus medica, a tree growing in Madeira, Spain, Italy, Persia, and other places. The fruit is oblong, five or six inches in length, warted and furrewed with a rough yellow rind, and a subacid but edible pulp. It is chiefly valued, however, for the fragrance of the rind, from which a delicate sweetmeat is prepared. There are a great variety of citrons. The fingered citrons are a large kind, much esteemed by the Chinese, who place them upon porcelain dishes, and have them in their apartments to fill the air with fragrance. Another variety is in great demand by the Jews, who use it as a conserve at their Feast of Tabarnaeles. Citrons are generally imposted in sale and a second transfer. Citrons are generally imported in salt and water, and sometimes

preserved with sugar.

a valuable perfume obtained from the civet cat (Viverra civetta), a CIVET, a valuable perfume obtained from the civet cat (viverra civetta), a native of Brazil, Guinea, Madagascar, and the East Indies; but of which numbers are kept for commercial purposes in Holland. This perfume is produced by both sexes, and is contained in two cavities or pockets placed beneath the tail; these cavities are smooth internally, and covered with numerous small pores, connected with the glands from which it is secreted. It is of a clear yellowish or brownish colour, about the consistence of honey, and uniform throughout. Undiluted, the smell is offensively strong, but when mixed with other substances, it becomes

colour, about the consistence of honey, and uniform throughout. Undiluted, the smell is offensively strong, but when mixed with other substances, it becomes what some consider a fragrant perfume. Civet was formerly in high repute in Europe, but is at present little used, excepting in the composition of some kinds of perfumery, to increase the power of other scents. When genuine it is worth from 80s. to 40s. an ounce.

CLAFTER, a name given to the fathom in Germany and Switzerland.

CLARET, a name given in this country to the red wine of Medoc, imported from Bordeaux, or more commonly a mixture of that and the wine of Benicarlo, in Spain, or some full-bodied French wine. In France, Clairet is a general name for all rose-coloured wines. [WINE]

CLEARING A SHIP is registering her name and cargo, on leaving a port, in the books of the customhouse.

CLEARING-HOUSE. [Bank.] \$

CLOCK (Fr. Horloge. Ger. Wanduhr, Uhr, Grosse-Uhr), a timepiece constructed on the same general principles as the watch, but having its motion regulated by a pendulum, instead of a balance and spring. The early history of clocks is enveloped in obscurity; but the invention of the pendulum clock is supposed to have occurred about twenty years after the discovery of the isochronal property of the pendulum by Galileo in 1639. Many of the most important improvements on the machinery of the clock have been the work of Englishmen; of these may be mentioned the anchor escapement of Clement, a London clockmaker, in 1680, Harrison's pendulum, and Graham's dead-beat escapement. The chief seat of the clock manufacture of the United Kingdom is London. As in the case of watches, the different parts of the mechanism of the clock are made by different sets of workmen, and polished and adjusted by others. The foreign clocks imported into the United Kingdom consist chiefly of German or Nuremberg wooden clocks. [WATCHES.] \$ clocks. [WATCHES.] S

Clockmakers are bound to engrave upon the dial-plate their name and residence.
The importation and exportation of clocks and watches are regulated by the act 3 & 4 Wm. IV.
c. 22, § 88 & 104. [Currous.]
Clocks and watches for private use, however, not being marked in the manner required by the said act, may be admitted on payment of the proper duty, upon the party making a declaration of his entire ignorance of the law at the time he purchased the clocks and watches, and that they are for his own private use. (T. 0. September 4, 1898.)

CLOFF, the name given to a small commercial allowance or deduction (commonly 2 lbs. per bale), made from the original weight of some kinds of commodities on their sale. It is now nearly obsolete.

CLO 159 COA

CLOVER-SEED (Du. Klaver-saad. Fr. Semence de trèfte. Ger. Kleesaat), the produce of a plant (Trifolium) of which there are two principal kinds: red clover, a biennial; and white or Dutch clover, a perennial. Red and white clover seeds are largely imported from Germany, Holland, Belgium, France, and the United States; and about 100,000 cwts. are annually entered for home consumption. As the foreign seed frequently contains weeds, its quality should be examined by pressing the moistened thumb to the sample, and looking to the colour and alternates of the seeds which are turned up. plumpness of the seeds which are turned up.

An acre of clover will, on good land, produce about three tons and a half of dry hay; of which two tons will be procured from the first cutting, and one and a half from the second; on highly manured land, greater crops are obtained. CLOVES (Du. Kruidnagelen. Fr. Clous de girofie. Ger. Gewitzsneiken. It. Garofani. Por. Craves da India. Sp. Clavillos. Rus. Gwosdika), the unexpanded

dried flowers of the clove-tree (Caryophyllus aromaticus), a native of the Moluccas. They have somewhat the form of a nail. Their colour should be of a deep pitch-They have somewhat the form of a nail. Their colour should be of a deep pitchbrown, internally reddish; their smell strong, peculiar, and agreeable; and their taste warm, acrid, and aromatic. The best are large, heavy, brittle, but not crumbly, and when pressed, exude a little oil. When light, soft, wrinkled, dirty, pale, and without smell or taste, they are to be rejected, having probably been steeped in water before being dried (Duncan's Dispensatory). Europe was for a long time supplied exclusively from Amboyna, where the cultivation of the spice is monopolized by the Dutch; but the clove-tree has now been carried to most of the tropical parts of the world, and particularly to Sumatra, and the western parts of the Indian Archipelago, to Guiana and Brazil. It is also cultivated in Mauritius; but the cloves are of inferior quality. Those of Amboyna are reckoned the best. The average quantity of this spice entered for home consumption is about 100.000 lbs. 100,000 lbs. 8

CLOVE-OIL. Cloves yield by distillation nearly one-sixth of their weight of seential oil, of a deep red colour, having the flavour of the clove, but comparatively nilder. Sp. gr. 1034. It is a powerful stimulant.

COACH, CARRIAGE. The coachmaking trade is carried on principally in London and Edinburgh, and to a considerable extent also in most large towns have constant the kinedom. throughout the kingdom. The number of persons employed in this manufacture is estimated at about 6000. Besides making coaches for sale, a number of manuis estimated at about over. Desires making control for said, a minute of the facturers are partially engaged in the stage-coach business, by lending out vehicles to speculators, and keeping them in repair, in return for about 2₂d. or 3d. for every mile travelled. A few are exported to India and other places; but almost none are imported,—a circumstance attributable partly to the state of excellence to which the manufacture has arrived in this country, and partly to the high import duty on foreign carriages.

Mail Coaches are under the management of the Post-office. Hackney Coaches are subject to special regulations in different districts: the hackney and stage carriages of London are regulated by the acts 1 & 2 Wm. IV. c. 22; the 16 & 17 Vict. c. 23, and 16 & 17 Vict. c. 127. The last two of which fix the fare at 6d. per mile, or 2s per hour; the annual licence duty at £1. and the weekly duty at 7s., or if the carriage be not used on Sunday 6s, weekly.

Stage Carriages, or all carriages where separate fares shall be paid by passengers for places therein, are subject in Britain to the following duties and regulations, in terms of 3 & 3 Wm. IV. c. 18; and 3 & 3 Vict. c. 68:—

For every original license to be taken out yearly by the person who shall keep any stage £ s. d. carriage, namely, for each carriage.

3 0 0 And for every supplementary license for the same carriage, for which any such original license shall have been granted, which shall be taken out in any of the several case provided for by the act during the period for which such original license was granted. 0 1 0 And in respect of every mile which any such stage carriage shall be licensed to travel; the following rates of duty per mile, namely, -if licensed to carry not more than 6 passengers, 1d. per mile; more than 6, and not more than 10, 1½d. per mile; and for each 3 additional passengers, id. per mile.

sengers, id. per mile.

The proprietors of railways in Britain shall pay for all passengers conveyed by hire in carriages at the rate of id. per mile for every four passengers so conveyed; and they are required to give security that they shall keep regular accounts of the same, and pay the duties. The Treasury is, however, authorized to compound for these duties.

Duties shall attach on every horse let for hire, or used either as a saddle-horse, or for drawing any carriage, and in respect of every horse of any mourning coach or hearse, except for drawing any stage carriage or hackney carriage, going no less than ten miles from the Postoffice, nor any fish cart.

Stage carriages, the roof of which shall not be more than 8 feet 9 inches from the ground, and the bearing of which on the ground shall not be less than 4 feet from the centre of the track of the left wheel, if licensed to carry not more than 9 passengers, shall be allowed to carry not more than 5 outside; 10 to 12 ditto, 8 outside; 13 to 18 ditto, 11 outside; 16 to 18 ditto, 12 outside; and if licensed to carry any greater

number than 18, shall be allowed to carry not more than 2 additional passengers outside for every 3 additional passengers licensed to carry, under penalty of £5. Driver, guard, and children in 18, not to be counted as passengers; 2 children under 7 years to be reckoned as 1 passenger. No person to sit on luggage on roof, nor more than 1 beside the driver; penalty £5. Justices, road-surveyors, toll-keepers, &c. are authorised to cause carriages and luggage to be measured, and passengers counted.

The other regulations have reference chiefly to the name-plates of the proprietors, and the conduct of the driver and guard.

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ASSESSED TAXES ON CARRIAGES.

BY 16 & 17 VICT. C. 90, THE FOLLOWING DUTIES ARE PATABLE ON PRIVATE CARRIAGES:-

£ a d.	l £1d
For every carriage with four wheels: Where the same shall be drawn by two or more horses or mules	And where any such carriage shall be kept and used solely above - mention- for the purpose of being let to for hire for hire principally and bond fide for and in the carrying of goods, wares, or merohandise whereby he shall seek a livelihood, where such carriage shall be occasionally only used in conveying passengers for hire, and in such manner that the stage carriage duty or any composition for the same shall not be payable under any licence by the Commissioners of Inland Revenue:
And where the same shall be drawn by one horse or mule only . 0 15 0 And where the same shall be drawn by one pony or mule only, not exceeding	Where such last-mentioned carriage

Ecomptions.—Any carriage licensed as a hackney carriage, or public stage carriage, or carriage let for hire, with a horse therewith, by any person duly licensed to let horses for hire. Also any waggon, van, cart, or other such carriage which shall be kept to be used solely in the course of trade or in husbandry, and whereon the christian name and surname and place of abode of the owner, shall be legibly painted; provided that such carriage shall not on any occasion be used for any purpose of pleasure, or otherwise than as aforesaid, except for conveying the owner or his family to or from any place of divine worship.

Coaches were introduced into England about 1570, and by the year 1600 were in general use among the wealthy classes. Prior to their introduction, the only mode of travelling by land was on foot, on horseback, or in litters,—the use of the last, however, being conflaed to the sick, to ladies of rank, or to the carriage of the dead. "When the daughter of Henry VII. regarded to Scotland in 1503, she travelled for the most part on a 'faire palirey,' two footmen in her train, carrying one varcy riche litere, borne by two faire courses varcy nobly drest; in the wich litere the sayd quene was borne in the intrying of the good towners or otherways to her good playsur." At Datkeith she was met by her future spouse, James IV.; and the royal lovers made their entry into the capital, 'the kyng monted upon a pallefroy, sygth the quene behynd kyny, and so rode thorow Edenborough" (New Edinburgh Almanac, 1839). Hired coaches were not introduced until 1785. In 1837 there were 54 four-horse, and 59 pair-horse mail coaches were not introduced until 1785. In 1837 there were 54 four-horse mails on 1625; but the average of the whole being 85 miles per hour. There were besides 30 four-horse mails in Iroland; and 10 four-horse mails, and 4 pair-horse mails in Scotland. The number of licensed stage-coaches, including mails, in 1837, was 3026; of which about one-half (1807) began or ended their journeys in London. The amount of revenue derived in 1837 from carriages of all kinds (exclusive of that from horses) was £546,233.

COAL (Dan, Steenkull. Du. Steenkoolen. Fr. Charbon de terre. Ger. Steinkohlen. It. Carboni fossili. Por. Carvoes de terra. Rus. Ugolj. Sp. Carbones de terra. Sw. Stenkool is the result of the mineralization of vegetable remains. It exists in many parts of the world, but in none is it produced so abundantly as in Britain. The most important English coal-fields are situated in Northumberland and Durham; but coal is likewise found in large quantities in Wales, Yorkshire, Lancashire, Cumberland, Gloucester, Somerset, and in the midland counties. The Scottish coal-fields are chiefly situated in the Edinburgh and Glasgow districts, in Fife and in Clackmannan. In Ireland coal is worked in the counties of Antrim, and Kilkenny: but the produce of that part of the United Kingdom is not Leitrim, and Kilkenny; but the produce of that part of the United Kingdom is not great to the consumption.

Coal is of different kinds; as, brown coal, found at Bovey in Devonshire, and in several parts of the Continent; pitch coal or jet; glance or anthracite coal, of which Kilkenny coal appears to be a variety; and black or common coal:—the last being the kind principally found in this country. Dr Thomson has arranged the different kinds of coal which are met with in Britain into four subdivisions (An. of Phit. vol. xiv.). The first is caking coal, because its particles are softened by heat, and adhere together, forming a compact mass: the coal found at Newcastle, around Manchester, and in many other parts of England, is of this kind. The second is termed splint coal, from the splintery appearance of its fracture. The cherry coal occurs in Staffordshire, and in the neighbourhood of Glasgow: its structure is slaty, and it is more easily broken than splint coal, which is much harder; it easily takes fire, and is consumed rapidly, burning with a clear yellow flame. The fourth is cannel coal, which is found of great purity at Wigan in Lancashire; in Scotland it is called parrot coal: it emits a brilliant light, possesses a very compact structure, and is peculiarly well fitted for the manufacture of gas. Coal is of a great variety of qualities, as almost every pit has in trade a distinct character. character.

The employment of this mineral in England as fuel extends little farther back than six centuries; and it was not until about the reign of Charles I. that it was in general use in London and other large towns. Its consumption has since kept pace with the increase of population and industry, and with the advances in the art of mining. The invention of the steam-engine, the improved mode of propping the mines introduced in 1810, and the advantages derived from the safety-lamp of Davy (first used in 1815), have greatly facilitated the working of coal in modern times; and since the commencement of the present very, its consumption has been more than doubled. At present the annual consumption of the United Kingdom is estimated at 58,000,000 tons, which, at the rate of 10s, per ton, will amount to £29,000,000,—a sum considerably exceeding the value of the

annual produce of gold and silver throughout the world.

The following table exhibits the quantities shipped coastways, and exported to foreign countries at the different ports in 1839:—

	Constways.	Exported.		Constanys.	Exported.
ENGLAND.	Tone.	Tons.		Tons.	Tone.
London Portsmouth Bristol Gloucester Cardiff Newport Swanses	9,940 3,710 74,786 145,087 470,820	6,874 3,058 4,879 13,035	SCOTLAND. Leith. Borrowstounness. Grangemouth Kirkoaldy Greenock Port-Glasgow	196,183 69,383 46,960 1,369	33,029 11,151 7,138 16,011 3,768
Lianelly. Milford. Chester. Liverpool Pleetwood.	141,889 63,221 88,111	3,991 103,630 107	Glasgow	101,038 248,417 73,457	19,924 151
Whitehaven	50,141 1,259 2,159,321	2,439 1,379 558,069	ireland.	699,348	
Stockton	1,308,778 13,285 132,475	28,426 4,802	Outlier por activities	225 1,863 2,088	2,306
	6,521,577	1,315,137	Totals	7,223,013	1,449,417

Of the 7,223,013 tons shipped coastways, 336,968 tons consisted of culm, which was sent almost wholly from Swansea, Llanelly, and Milford, and 13,015 tons of cinders, chiefly from Newcastle. All coal sent coastways by sea was, in the reign of Wm. III., subjected to a tax of 5s. per chaldron, which, during the late war, was raised to 9s. 4d.; it was reduced in 1824 to 6s., and in 1831 it was repealed; in 1830 the revenue yielded by this tax amounted to £1,021,862.

In 1836 an act (6 & 7 Wm. IV. c. 109) was passed which repealed certain provisions contained in three previous acts (9 Anne, c. 28; 4 Geo. II. c. 30; and 28 Geo. III. c. 53), by which combinations in the coal-trade to enhance the price were declared unlawful, and which also had the effect of preventing more than five persons from carrying on trade in coals in partnership.

The coal-trade in different parts of the kingdom is regulated by a great variety of local statutes; the shipments from the Tyne by the "Turn act," 6 Geo. IV. c. 32, which provides that every ship must be loaded in her "turn;" and the London trade by the act 1 & 2 Wm. IV. c. 76, continued and amended by 8 & 9 Vict. c. 01, to the year 1862. The chief provisions of these acts are the following:—

O1, to the year 1862. The chief provisions of these acts are the following:—
The duties previously payable upon coals commuted for 13d, upon every ton sold within the limits of the city; namely, 8d, per ton payable to the fund for public improvements; 4d, per ton to the corporation of London; and 1d, per ton to the coal market. Coal Exchange to continue vested in the corporation of London; and to be an open market. § 2.4. Court of Alderman may make by-haw to regulate the market, § 3.2. Coals to be sold by weight; and the chakiron measure formerly used to be reckoned equal 25¢ cwiz., § 4.3. 44. With coals exceeding 560 lbs. delivered from any lighter, or from any wharf within 25 miles of the General Post Office, the seller shall deliver to the purchaser immediately on arrival, and before unloading, a ticket specifying the name of the coal, and the quantity; and a weighing machine is directed to carried with every wagon, and the carman to weigh gratuitously any sack chosen by the purchaser, under penalties of £20, § 47. Coals above \$20 lbs. to be delivered in sacks containing sither 112 lbs. or \$24 lbs. net; coals delivered by gang labour may be conveyed in sacks containing any weight, such being first mentioned, and may be delivered in bulk if the purchasers think fit; but the weight of the cart and coals therein shall be previously accortained by a weighing machine, and the seller's ticket shall state the weight of the cart and of the coals therein, under penalty of £50. Further regulations were made in 1881, by 14 & 18 Vict. c. 116, in respect of coals brought by railway and canals.

The consumption of coal in London in the year 1837 amounted to 2,626,997 tons, which, with the exception of 18,735 tons Scotch, 33,259 tons Welsh, and 14,963 tons Yorkshire, were brought almost wholly from Newcastle, Sunderland, and Stockton; the number of vessels which entered the port of London with coals in the same year was 8720. In 1838, the consumption of London was 2,552,321 tons, in 1839, 2,611,616 tons; in 1845, 3,463,630 tons, and now above 4,000,000.

Of late years considerable interest has been excited both in and out of Parliament by a system under which the supply of coals to the London market is limited when the prices are below certain defined rates. It would appear, that for the ostensible object of preventing an undue fluctuation of prices, an arrangement, called "The Limitation of the Vends," has (though subject to occasional interruptions) long existed among the coal-owners in Durham and Northumberland, by which the quantity to be raised from the different collieries is apportioned according to the probable demand. "When," says Mr Brandling, "it is understood by the coal-owners that all the parties interested in the coal-trade on the Tyne and Wear are willing to enter into an arrangement of this nature, a representative is named for each of the collieries; these representatives meet together, and from amongst them choose a committee of nine for the Tyne, and seven for the Wear. This being done, the proprietors of the best coals are called upon to name the price at which they intend to sell their coals for the succeeding twelve months; according to this price the remaining proprietors fix their prices; this being accomplished, each colliery is requested to send in a statement of the different sorts of coal they raise, and the powers of the colliery, that is, the quantity that each particular colliery could raise at full work; and upon these statements the committee, assuming an imaginary basis, fix the relative proportions as to quantity between all the collieries which proportions are observed whatever quantity the markets may demand. The committee then meet once a-month, and according to the probable demand of the ensuing month, they issue so much per 1000 to the different collieries; that is, if they give me an imaginary basis of 30,000, and my neighbour 20,000, according to the quantity of our coals, and our power of raising them in the monthly one as the probable demand of the different markets for the year, if the markets should require more, a

The criterion by which the coal-owners are guided is the price in the London market. This price, however, is alleged to be very much under the control of the coal-factors, who, it is said, are enabled, by the co-operation of the northern owners, to regulate the number of cargoes to be unloaded, and in this way artificially to elevate the price to the consumer. The regulation of the coal-factors of date 2d February 1837 bears, "That in consequence of the great increase of price of

^{*} The following are the annual proportions which the committee for regulating the issues haw apportioned upon the nominal basis of each colliery in the regulation since its establishment:—
In 1834, 645 chaldrons per thousand; in 1835, 768 chaldrons; in 1836, 765 chaldrons; in 1837, 776 chaldrons; in 1838, 695 chaldrons; in 1839, 644 chaldrons; and in 1840, 585 chaldrons per thousand.

every thing connected with shipping and the coal-trade, the following scale be adopted," namely, to admit from 30th September to let March, 40 cargoes, when coals rule 23s. 6d.; 50 cargoes when they rule from 23s. 9d. to 24s.; 60 cargoes when from 24s. 3d. to 24s. 6d.; and 70 cargoes at 24s. 9d. From let March to let April, each rate is reduced 6d.; and from let April to 30th September, a further reduction of 6d. is made on the scale. The price here stated is the wholesale price charged at the coal-exchange." According to Mr Pease, the particulars of the cost of one ton of best house-fire coal (as Bewicke, Craister, Wall's End, Goeforth, Heaton's, and others of a similar quality), from the Tyne, supplied to a London consumer, assuming the price paid by him to be £1, 12s. 6d., is as follows:—let, Cost on board of a ship in the Tyne, 10s. 6d.; 2d. Charges at coal-market in London, including city dues, insurance, &c., 2s. 8d.; 3d, Freight to shipowner, including harbour dues, &c., 9s. 4d.; 4th, coal-merchant in London, including screening, carting, &c. 10s.; in all, £1, 12s. 6d. (Par. Paper, 1838, No. 475, pp. 7, 165.)

Notwithstanding the clamour which has been raised upon this subject, it may be doubted whether any material reduction could be made on the price charged by the northern coal-owner, as he is kept in check by the competition of proprietors in other places, who are not parties to the alleged combination. But the fact that the cost free on board, in the Tyne, is more than trebled upon the consumer in London, shows that abuses must exist in the mode of conducting the trade there; and an axamination this will be found to be the case. An unnecessary delay occurs and on examination this will be found to be the case. An unnecessary delay occurs in the discharge of coal-vessels after their arrival in the Thames,—a circumstance which must produce an extra charge for freight; while, in unloading and in all subsequent operations, a want of economy is conspicuous, and charges are accumulated in a manner without parallel in any other port of the kingdom. In Edinburgh, situated on elevated ground, 2 miles from the port, the shipping price of Newcastle coal is only about doubled on the consumer.

Newcastle coal is only about doubled on the consumer.

The exportation of coals was formerly checked by a heavy export duty of 6s. 5d. Proceedings, and is. 8d. per ton upon small coals; but in 1831 these duties were modified; and in 1835 (4 & 5 Wm. IV. c. 89) they were repealed, with the exception of an advalorem duty of 10s. per cent. when exported in a British ship, and of 4s. per ton when exported in a foreign ship. No duty is exigible on shipments to the British colonies. As coal can be frequently taken as ballast, it is now exported in increasing quantities to foreign countries. In 1839, the quantity exported was, as already stated, 1,449,417 tons; whereof, France, 340,373 tons; Holland, 180,348 tons; Denmark, 129,005 tons; Germany, 116,678 tons; Russia, 78,064 tons; Prussia, 83,942 tons; Italy, 30,279 tons; Malta, 27,988 tons; British America, 50,983 tons; British West Indies, 64,078 tons; United States, 52,930 tons; Brazil, 21,066 tons; other countries, 273,693 tons; the declared value of the whole was £542,609.

It is not now necessary to enter into bond for the due exportation of coals to British possessions; but when they or any other articles shall be exported in foreign vessels, on payment only of the low duty (under treaties of reciprocity), security by bond shall be given (for the amount of duty at risk) for the due landing of the articles so exported in some port of the country to which such vessel shall belong, and for the production, within six months, of certificates by the British consult st such port of the due landing of the cargoes, before such bonds shall be disclared: the parties executing the bond are to be the master and mate of the vessel only, and the stamp-duty on the bond is to be remitted to the party. (Min. Com. Cas. July 12, 1837; Treas. Order, Nov. 7, 1837, and Dec. 23, 1838.)

Duration of Coal.—There is much fallacy in the conjectures which are so frequently hazarded in regard to the duration of our coal-mines. Some persons perceive in them a store of fuel laid up for thousands of years, even at the present increasing rate of consumption; while others pronounce as confidently that cold and starvation await us before five centuries shall have elapsed. The present vast demand, it is true, would exhaust our known coal-fields in a calculable time, but we have the unknown, or rather unsurveyed, in reserve, to which ingenuity and enterprise will gradually extend themselves. We have also ground to hope that the present waste of coal in the mine and on the bank cannot always continue, for in the progress of knowledge we have an assurance, that every year, as it increases the necessity, will also increase the means of economizing our resources. When we consider the augmented effect of coal in the steam-engine since the days of Watt, and the saving

^{*} Much dissatisfaction exists among the owners of the best coals in the north with the coal-factors' regulation in London, which often precludes the best description of coal from being offered for sale until the inferior qualities have been taken off the market by the coal-merchants, and it is considered as not improbable that some alteration in the present system will be the result.

of fuel which the introduction of the hot-blast, and of anthracite coal in the smelting of iron, promises to occasion, we cannot doubt that a general rise in the price of coal would stimulate ingenuity to the discovery of other improvements by which equal effects might be produced without increase of cost. Such a stimulus is already in some measure supplied by the economy of fuel which the employment of steam-vessels in long voyages renders necessary, and from this important results must follow. Meantime, the only legitimate end to be aimed at by speculators on the duration of coal, is the prevention of all waste. If, to the best of our power, we husband our resources, we may safely leave to posterity the management of their own interest,—the task of compensating for a diminution of mineral resources by an increase of mechanical skill and ingenuity.

CORATING-TRADE. [Commence. Cusroms. Surprime.]

COBALT (Fr. Cobalt. Ger. Kobalt), a reddish-gray brittle metal, somewhat soft, and difficulty fusible; it possesses little lustre. Sp. gr. 36. The finest specimens are the produce of Saxony. Cobalt is never employed in a separate state, but the impure oxides of the metal, called saffre and smalts, are extensively used as colouring materials. Cobalt blue, or Themero's blue, is a beautiful pigment prepared from the phosphate of cobalt, which may sometimes be introduced by painters as a substitute for ultramarine. Chromade's Chemistry.)

COCA, a shrub (Erythrosylon coos) cultivated extensively on the Andee of Peru, on account of its leaves, which, when dried and mixed with burnt lime, form a stimulating narcotic, which is much used by the Peruvians as a masticatory. The use of coos brings on a state of apathy to all surrounding objects, and its effects are of the most pernicious nature, exceeding even those of epium in the destruction of mental and bodily powers. A confirmed coos-chewer, or cognessor, is said nearly is estimated at above 23 millions of dollars.

COCULUS INDICUS (Fr. Cogne de Levent. Ger. Fischkörmer. It. communicated by art, which may be discovered by the article having, in this case, an unpleasant odour. Cochineal, though affording a crimson solution, is generally used for dyeing scarlet, and is employed chiefly for woollen goods.

The production of cochineal is confined to Mexico and Central America; but, as

The production of coonineal is conniced to mexico and Central America; out, as it comprehends a great value in small bulk, it is frequently used by merchants for remittances, and is thus imported from many other places besides the countries of production. The consumption in this kingdom was nearly doubled after a great diminution of the duty in 1824; and it has again much increased since the late reduction to 1s. per cwt. (1 & 2 Vict. c. 113), which took effect from the 5th January 1839; the average quantity annually entered for home consumption in the four previous years having been 170,000 lbs.; whereas, in the year to 5th January 1840, it amounted to 490,000 lbs.

COCKET, a custom-house warrant, given on the entry of goods for exportation,

in evidence of their having paid duty, or being duty free.

COCKLE, a shell-fish (Cardium) which abounds in the seas of almost every warm and temperate climate. It is generally found buried in sand near the shore. The species are numerous, and some grow to a very large size. The common cockle (C. edule) is well known as a cheap article of food in most of the towns on

COCO, or COCOA-NUT (Pers. Narjible), is the product of a species of palm (Cocce sucifers) found in all tropical countries. The milk of the cocca-nut is a pleasant refreshing liquor contained within the kernel while it is yet growing, and pleasant regressing inquor contenies within the actions while it is you growing, and which diminishes in quantity as the kernel approaches to maturity. This last has much the taste of the filbert. The importance of the cooca-nut tree to mankind has caused it to be cultivated wherever the climate is favourable to its growth. It is sometimes found throughout extensive tracts, to the exclusion of all other trees. Almost the whole Brazilian coast, from the river San Francisco to the bar of Mamanguape, about 280 miles, is thus occupied; and it was estimated some years ago that about 10,000,000 trees were growing on the south-west coast of Ceylon. The nuts are generally brought to Europe as wedges to fasten casks and other packages in vessels; their freight, therefore, costs nothing. About 400,000 lbs. are annually entered for home consumption.

entered for home consumption. S

The coros palm is from 60 to 100 fact in height, and I to 2 feet in diameter; at the top it is crowned with a magnificent taft of leaves, each about 14 feet in length, and resembling an enormous feather. A good tree produces from 50 to 80, sometimes 100 nuts in a year; and each nut is considered equivalent, as food, to at least 3 os. of rice. It grows best in the moist low grounds that border the seaceast, or which form the neighbouring islands. Nothing can be more centriful than these coocs groves. The bare trunks rise like columns to a vast height, and the regular foliage, arching their summits, carries the eye along the vistas, as it were, of a boundless gothic edifice. It is a very profile tree; flowers are put forth every four or five weeks, and thus flowers and fruit are generally to be seen at the same time. It farmishes materials for almost an infinite variety of purposes. Of the roots are constructed backets; of the hollowed trunk, drums, pipes for aqueducts, and similar articles. The reticulated substance at the base of the leaves, besides serving for infants' cradles, is manufactured into coarse exclude. The terminal has accounted a delicacy for the table. The leaves are employed for thatching buildings, for making backets, fences, and torches, besides furnishing the chief diet in Ceylon for the tame elsephants; in a young state they are transparent, and are made into lanterns by the natives. The woody ribe of the leafest are formed into a kind of backet-work for exteching fish, and into the brushes and brooms employed for domestic purposes. Good potsan is yielded by the ashes, and the latter is used instead of soap by the native washermen. From the unexpanded flower is procured a sweet jutice which is converted into wine, and subsequently distilled into arrack, which is manufactured in very large quantities in the island. From palm-juice is likewise prepared, in great abundance, a coarse kind of sugar called daggery. The value of the fruit of this tree can only be fu

queen of the pairms.

Cocoa. Nor Ott. is obtained from the albumen, or white solid matter contained within the shell, by pressure or decoction; usually the former. This oil is used in lamps, in the manufacture of candles and torches, in the composition of pharmaceutical preparations; and mixed with dammer it forms the substance used in India for calking the seams of ships. It is largely imported into the United Kingdom from Ceylon, and about 30,000 cwts. are annually entered for home consumption.

COCOA. [CAGAO.]
COCOON, the oblong roundish ball formed by the silk-worm by winding around itself the silk which it draws from its bowels.

COD (Du. Kabeljaauw, Baukaelja. Fr. Morue. Ger. Kabljau, Bakalau. It. Baccala. Por. Bacalhāo. Sp. Bacalao), the most valuable of the white fish (Gadus Morrhua, Linn.; Morrhua vulgaris, Cuv.) is found universally from Iceland nearly to Gibraltar, and is very abundant on the coast and islands on the E. side of America, from N. lat. 40° to 66°, particularly at Newfoundland. It spawns in our seas about February, and nine millions of ova have been found in the roe of one female. It is in the best condition, as food, from the end of October to Christmas. Two varieties are distinguished in the British seas, the northern or Scotch cod, a bluntheaded, lighter-coloured fish; and the southern or Dogger Bank cod, a sharpernesed, darker fish: both are equally good, and are sometimes taken on the same ground. As cod generally inhabits water from 25 to 40 fathoms deep, its capture is only attempted with lines and hooks. It is voracious, and easily taken; from 400 to 550 fish have been caught at the Newfoundland bank, in 10 or 11 hours, by one man. "In this country, it appears to be taken all round the coast; among the COD 166 COD

islands to the N. and W. of Scotland it is abundant; most extensive fisheries are carried on; and it may be traced as occurring also on the shore of almost every county in Ireland."—"A change has lately taken place from the cod having shifted their ground. Formerly the Gravesend and Barking fishermen obtained no cod their ground. Formerly the Gravesend and Barking handrene obtained no code mearer than the Orkneys or the Dogger Bank; but for the last two or three years, the supply for the London market has been obtained by going no farther than the Lincolnshire and Norfolk coasts, and even between that and London, where previously very few fish could be obtained." (Yarrell's British Fishes.)

The Great Bank of Newfoundland, the celebrated resort for the cod-fishery, is a large rocky shoal extending towards the east of the island, about 600 miles in length and 200 in breadth. The ocean flowing over this vast submarine mountain contains perhaps as much human food as a land territory of equal extent; and although the perhaps as much human food as a land territory of equal extent; and although the maritime nations have for several centuries laboured indefatigably in it, not the slightest diminution of fruitfulness has ever been observed. For a long time the fishery was chiefly confined to this bank, and to vessels sailing from European ports. As soon, however, as permanent settlements began to be formed, it was found that the S. E. coast, rocky and deeply embayed, afforded a supply almost equally exhaustless, the produce of which could be cured there much more cheaply and conveniently. The bank-fishery was in consequence gradually deserted by the British; and if the French and Americans still carry it on to a certain extent, we may conclude that it is entirely owing to the want of the same conveniency on shore.

conclude that it is entirely owing to the want of the same conveniency on shore.

The fishery now carried on by our countrymen chiefly extends along the coasts The fishery now carried on by our countrymen chiefly extends along the coasts of Labrador, principally the south-eastern tract opposite to Newfoundland, and separated from it by the Straits of Belleisle. Twenty thousand British subjects are annually employed, with from two to three hundred schooners, on the Labrador stations. About four fifths of what we prepare is afterwards exported to the southern countries of Europe, chiefly for consumption during Lent, and the other fasts of the Roman Catholic church. A great quantity is carried into Newfoundland green or pickled, that is, it is split and salted, but has not been dried at the stations. In general, however, it is dried; after undergoing which, and a careful inspection, it is divided into three sorts:—1. Merchantable, of the finest colour and quality. 2. Madeira, which are nearly equal to the first. 3. West India, decidedly inferior, yet capable of standing a sea-voyage, and being kept a considerable time. These last, with the greater part of the Madeira, are destined for the aliment of the negroes in the West Indies. The bank-fish is inferior in appearance to the shore-fish, and, to a certain degree, in quality, from the process of drying (which must be done on shore) being often performed too late, and with fewer conveniences than in the case of the shore-fishery. It is, however, of a larger size, which secures a preference in some markets. which secures a preference in some markets.

The annual produce of the British fishery of Newfoundland, including the fish carried there from Labrador, at different periods since 1790, was as follows. The quantities stated are quintals of dried fish, each equal 112 lbs., or 1 cwt. avoirdupois.

1790,	1791, 1	792,	276	rage	quint	als 656,800	1830				quintal	s 760,177
1798,	1790, 1	.800			•	382,881	1832				•	619,177
1805						596,380	1833					883,536
1815						1,245,808	1834					674,988
1890						899,729	1835		-			727,586
1825		_		_		973,464	1836		_	_	٠.	990 354

The state of the fishery may thus be regarded as statiouary. The price obtained for cod, however, has varied remarkably. In 1814, it was estimated at £2 per quintal; in 1831, 1832, and 1833, at not more than 10s. In 1834, it rose to about 13s.; but in 1836, again fell to 10s. The value of the 860,354 quintals dry fish, in 1836, is stated in the public accounts at £517,457, of which there were exported, 810,598 quintals, value, £483,638 sterling; the value of the core and pickled fish, in the same year, being, besides, £1665. This, however, was exclusive of the fisheries of Nova Scotia, Cape Breton, Canada, and New Brunswick, the produce of which is stated under these heads respectively. The quantity of fish imported that the United Kingdom, re-exported, and consumed, for a series of years is stated into the United Kingdom, re-exported, and consumed, for a series of years, is stated in the accounts of the Board of Trade as follows, without however distinguishing the portion thereof consisting of cod:—

		1834.	1835.	1836.	1837.	1838.
Imported, cwts		51,974	68,337	86,165	125,133	103,448
Re-exported		17,419	5,360	9.916	13,310	6,574
Entered for consumption	•	34,562	62,752	76.474	111,823	96.874

Great Britain, by the treaty of 1816, ceded to France the right of fishing on the

shores of Newfoundland, from Cape John to Cape Ray, with the islands of St Pierre and Miquelon; and in 1832, this power employed about 325 vessels, of from 100 to 400 tons each, in her fisheries on the British American coasts and banks, and 14,000 fishermen; and the produce of their fishery in the same year was about 354,000 quintals, value £300,000 sterling; to protect which the government pays on the average £50,000 in bounties. The French vessels are principally fitted out at St Malo, Bordeaux, Brest, Marseilles, and Dieppe.

The Americans of the United States, by the convention of 1818, possess the privilege of fishing along all the coasts within three marine miles of the shore; and of curing fish in such harbours and bays as are uninhabited, or, if occupied, with the consent of the inhabitants. Their first spring voyage is made to the banks; the second either to the banks, Gulf of St Lawrence, or the coast of Labrador; the third, or fall voyage, is again to the banks; and a fourth, or second fall voyage, is

third, or fall voyage, is again to the banks; and a fourth, or second fall voyage, is also made, sometimes to the banks. In these fisheries they have annually engaged from 1500 to 2000 schooners of 90 to 130 tons, employing about 20,000 scamen. The total produce of their cod-fishery was stated some years ago at 1,850,000 quintals, of which about 1,500,000 quintals were taken in the British American seas. The advantages from their vicinity to the fishing grounds. Their vessels are chiefly

fitted out at Boston, and other ports on their north-eastern coast.

The history of the cod-fishery, and of the dissensions it has frequently produced between the maritime states, with a full account of the different methods by which the fish are caught and cured, will be found in M'Gregor's "British America," vol. i. chap. 9 & 10; also in Edinburgh Cabinet Library, "British America," vol. ii. chap. 12.

chap. 9 & 10; also in Edinburgh Cabinet Library, "British America," vol. ii. chap. 12. [FISHRRIES.] \$

CODILLA, the part separated or picked out in cleaning hemp or flax.

COFFEE (Du. Koffy. It. & Por. Caffé. Ger. Koffe. Rus. Kafé. Fr. & Sp. Café) is the berry of the Coffaa Arabica, an evergreen shrub with an erect slender trunk, in height from 8 to 15 feet, and having long flexible branches. The shower resembles that of the common jasmine, and the fruit is like a small red cherry, enclosing within a soft pulp the two oval seeds familiar to every one as the coffee bean of commerce. The shrub begins to produce fruit when about 2 years old, and yields, according to its age and size, from 1 to 4 or 5 lbs.; but the quality of the produce from young plants is inferior to that from such as are 4 or 5 years old. Coffee only 2 or 3 months from the tree is not so good as that which has been kept a year; but when older it becomes deteriorated. When of good quality, the seeds or beans are hard and heavy, sink quickly in water, are of a light yellowish-green colour, sweetish taste, possess in a slight degree the peculiar odour of coffee, and are free from any damp smell. The beans from the West Indies are larger than those from the East. Before being used for domestic purposes they are roasted, a process by Fast. Before being used for domestic purposes they are roasted, a process by which they are increased to nearly twice their original size, while they lose about one-third of their weight. Coffee is very apt to imbibe moisture, or the flavour of any thing placed near it; much attention is therefore necessary in packing it on board ship or otherwise.

on board ship or otherwise.

The coffee shrub is indigenous to Abyssinia and Arabia, but it has been transplanted into many tropical countries, and is now of great commercial importance. Its chief celebrity, however, is derived from Arabia, where its cultivation seems to be best understood. The quantity shipped from the different places of its production is at present estimated at upwards of 250,000,000 lbs. The chief places, stated according to their importance in this respect, are Brazil, 72,000,000 lbs.; Cuba, 64,000,000 lbs.; Hayti, 40,000,000 lbs.; Java, 30,000,000 lbs.; British West Indies, Dutch Guiana, South American States, Ceylon, British India, French West Indies, Porto Rico, Sumatra, Bourbon, Philippines, and Mocha.

The consumption of coffee in this country was inconsiderable until of late years. In 1790, it amounted only to 973,110 lbs.; the duty on British plantation coffee being at the same time about 10½d. per lb. An increase of the duty in 1795 to about 1s. 5½d. per lb. reduced the consumption; and in 1800 it was only 826,590 lbs. An impetus, however, was given to the trade in 1807, when the duty was reduced to 7d. per lb.; and in 1810, the quantity entered for home consumption was 5,308,096 lbs. In 1820 it was 6,869,286 lbs. Its subsequent progress is shown in the following table:—

•

Account of the Quantities of Coffee imported, experted, and consumed in the United Kingdom; with the rates of import duty, revenue arising therefrom, and price of fine Jamaica Coffee in bond in July in the following years:—

168

	Imported.	Exported.	Consumed.	Duty per lb.		Revunue.	Price	per	Cwt
Years.	lbs.	lbs.	lba.		d.	£	4.		
18-1	45,937,869	41,635,956	7,893,001	W. Ind. B. P 1	^	384,963		to	194
1822	44,003,194	35,825,535	7,689,351	R. Ind. B. P 1	ĕ	387,342	140	٠.	156
			8,454,920	Powelers 9	Ğ	498,613	195	••	198 104
1824	60 607 519	97 900 900	8, 962,943 11,062,970	\		490,988 315,809	87 88	::	94
1896	42.017.103	31.894.978	13,203,323	1		336,570		::	88
			15,566,376			399,690	80	••	85
			17,127,633	II	_	440,245		••	77
			19,476,180	W. Ind. B. P 0 R. Ind. B. P 0	5	484,975 579,363	-	••	76 78
			22,691,522 22,740,627	Foreign 1	3	583,751	79	::	82
1839	A) 925 939	25.719.749	22,952,527	T. O. O. G.	_	589,858	87	::	89
1833	34,426,109	15,349,578	22,741,984	H		591,241	107		110
			23,785,096	11		614,434	70	••	106
			23,995,046	I TO THE PROPERTY OF THE PARTY		652,124	95 83	••	196
			94,947,690 96,346,961	W. & E. Ind. B. P. pro- duce of & import. from 0	6	691,616 696,645	103	••	110 194
1838	30,912,014	11.993.990	25,765,673		ğ	685.082	90	••	129
1839	39,850,789	12,762,587	26,832,268	E. Ind. imp. from 1	ĕ	779,855	194		156
1840	1	1) Foreign 1	3		121	••	150

Of the 39,932,279 lbs. imported in 1838, there were brought from the British West Indies 17,588,655 lbs.; East India Company's territories and Ceylon, 7,785,963 lbs.; Brazil, 10,373,713 lbs.; Hayti, 1,655,494 lbs.; Cuba and other Foreign West India colonies, 685,509 lbs.; Cape of Good Hope, 506,874 lbs.; West Coast of Africa, 267,303 lbs.; Colombia, 575,329 lbs.; the remainder in smaller quantities from Mauritius and other places. The chief exportations in the same year were to Belgium, 2,586,500 lbs.; Holland, 2,049,220 lbs.; Italy and Sicily, 2,308,822 lbs.; Turkey, 1,546,695 lbs.; Russia, 669,305 lbs.; Germany, 582,434 lbs.; Malta, 177,413 lbs.; and Syria, 128,158 lbs. It may be noticed, however, that besides the quantities of coffee entered as imported into the United Kingdom, numerous cargoes from Brazil and other foreign countries are sold in London by sample; the vessels waiting in a roadstead in the Channel until a sale is effected, when they are despatched, without breaking bulk, to Hamburg, Antwerp, Rotterdam, or some other port on the Continent.

port on the Continent.

The consumption of coffee in the United Kingdom has now overtaken the supply from the British West Indies and other colonies admissible at the low duty of 6d. per lb.; and the great increase of price which has consequently taken place, has, besides rendering adulteration with chicory, roasted rye, and burnt corn, very common, made it an object to import foreign coffee by way of the Cape of Good Hope, which, being held to be a British possession within the limits of the East India Company's charter, entitles such coffee to be introduced into this country for consumption at the next lower duty of 9d. per lb. In this way, great quantities of coffee, the produce of Brazil, Hayti, and other foreign countries, have been entered for home consumption; the additional cost of sending it for transhipment at the Cape being only from ad. to 1d. per lb. Java coffee is likewise introduced in this way through the Cape and Singapore. These evacions of the law, called in trade "colonising coffee," have been chiefly practised since the end of 1838, before which time the quantity introduced at the 9d. duty was quite inconsiderable. The ls. duty is nearly an exclusion; that at ls. 3d. is entirely so; the coffee imported into this country direct from Brazil, Hayti, and other foreign countries being merely warehoused for re-exportation to the Continent.

The absurd operation of the present regulations, under which the British con-

The absurd operation of the present regulations, under which the British consumer is made to pay the higher duty, and an increase of freight, while the foreign coffee is not excluded from the British market, though this was obviously the purpose of the law, has already engaged the attention of Parliament (Report on Import Duties, 1840), and it is considered probable that another session will not be allowed to pass without some remedy being applied by the legislature. The formation of temperance societies and other circumstances with regard to the habits of the people, are such as to be greatly more favourable than formerly to the use of coffee by the humbler classes, and little doubt is entertained that the revenue derived from it might be much increased by a different arrangement of the

duties. The following table, prepared by Mr Porter of the Board of Trade (Report on Import Duties, p. 200), exhibits, in a striking point of view, the advantageous effects which have been produced by the past reductions of the duty:—

CONSUMPTION	AT CAPPER	IN GREAT	RRITAIN

Years.	Population.	Pounds Weight Consumed.	Rate of Duty.	Consumption per Head	Tax per Head.
1801 1811 1821 1831	10,942,646 12,596,803 14,391,631 16,539,318 18,275,946	750,961 6,390,192 7,327,283 91,842,964 94,980,830	s. d. 1 6 per lb. 0 7 1 0 0 6	.os. 1-99 8-12 8-01 21-18 22-60	d. 14 4 6 8

The act 3 & 4 Wm. IV. c. 52, § 32, provides that no abatement of duties shall be made on account of any damage received by coffee; and by 3 & 4 Wm. IV. c. 57, § 33, coffee may be abandoned for duty. [Curroms. Warmouss.] Coffee-deslers must take out a license renewable annually. In London, coffee is sold in bond; the business is done in the market, either by public sale or private contract. The terms are—E. I. and W. I. British Plantation, I month, I per cent. discount, allowing 4 per cent. for cash; East India at a prompt of three months from the day of sale without discount; Foreign, I month, 2\(\frac{1}{2}\) per cent. discount, and 4 per cent. for cash. The tares are the same as allowed by the revenue. The draft on B. P., namely, casks of 5 cwt. and upwards, 5 lbs.; under 5 cwt. 4 lbs.; barrels and bags, 2 lbs.; Foreign and East India, 1 lb.

The prices in bond of the different kinds of coffee in the London market in January 1841 were as follow:—

MA IONO M 1—									_
8.	4.		s.	d.	6.	d.		8.	d.
Jamaica.					Dominica and St Lucia.				
Fine. Middling. & Pine)	_			_	Middling and Fine108		ŧn	1.92	0
Fine, Middling, & Fine } 112	0	to	135	0	Good and Fine Ordinary 80	Ă	•	100	
Good winding)					GOOD WIN LING OLDINARY. ON	·	• •	4100	v
Middling106	0		110	0	Middling and Good 58	0		68	0
Low do102	0		104	0	St Domingo, for export 42	0		47	0
Fine and Fine Fine Ord 90								46	- 6
Good Ordinary 80	ŏ	••	88						
0-31	•	••	-	•		•			•
Ordinary	Λ		70	0	Good and Fine Ordinary 40			55	
Ordinary	v	••	10	v	Middling and Good 58	0		68	0
Demerara and Berbice.					Porto Rico & La Guayra 41	0		72	0
	•		190	•	Rest India, Java 56	۵		70	0
7000 351100 0 7512001, 1209	•	••	200	•	ASSESS ALLCOM, GRAND		••	**	
Low Middling & Mid100	0		106	0	Ceylon, certificate 79	U	• •	80	0
Good and Fine Ordinary 78	0		98		Do. for export				
Ordinary	-				Granden and Gamerana 94	0		55	0
5	0		84	0	76 - 1	ã	-•	155	7.
Broken	•	••		•	Mocha105	v	• •	130	U

COIN, a flat circular piece of metal, impressed with a public stamp serving as a guarantee for its weight and fineness, and need as money. A variety of metals have been employed for this purpose; but the portability, permanent value, and uniform quality of gold and silver, have, from an early age, secured for them a general preference. Copper has also been very commonly used, especially for subsidiary coins; and of late years the Russian government has introduced plati-

num; but this last, though intrinsically well adapted for the purpose, has obtained only a partial circulation, from a want of confidence in the stability of its

Price.

Pure silver and gold, though invariable in their quality, are yet too flexible for the ordinary purposes of coin, and they are therefore mixed with a small proportion of harder metal, called alloy. The proportion of this, however, varies in different countries, and hence both the weight and the degree of fineness, or standard, of a coin have to be considered, the value of the alloy never being taken into account. In this country silver and gold are measured by troy weight; the fineness of silver is also denoted by the number of pennyweights and grains of pure metal contained in a troy ounce; but the fineness of gold is expressed in caratis. Of these 24 are supposed to be contained in any given quantity of the metal, and its quality is denoted by expressing the number which consist of pure gold. The British money standard of silver has for a long period been 11 oz. 2 dwts., equal to a fineness of 37-40ths; and that of gold 22 carats, equal to a fineness of 11-12ths: these have been found to be the proportions best suited for durability.

Although coins of both silver and gold are found in almost all countries, yet a preference is commonly given to one or the other as the medium for large payments,

Although coins of both silver and gold are found in almost all countries, yet a preference is commonly given to one or the other as the medium for large payments, or standard of value. In general silver has been adopted for this purpose, but in some countries gold is used; in others, both metals are employed,—their mutual convertibility being determined according to a fixed rate of exchange. It does not appear that either of the precious metals is naturally better suited than the other for a standard; but the adoption of both, though approved by Sir Isaac Newton, has been generally productive of disorder, owing to the variation in the market-prices to which silver and gold are subject, as well as other commodities, and the tendency thus produced of the one kind of coin to drive the other out of circulation. Formerly both metals were legal tender in England, and in 1717, their relative value was fixed at one guinea in gold, for 21 shillings in silver. This was an overvaluation of the former, to the extent of rather more than laper cent., a difference which afterwards increased, and led, before the end of the century, to the fusion or exportation of all silver coins of full weight, and the exclusive use of gold in all

Previous to the reform of the British coinage in 1815 much discussion arose as to whether gold, silver, or both metals, should be employed as the standard of value. At length this was decided for the time by the "Treatise on the Coins of the Realm," by the first Earl of Liverpool, in which it was maintained, "that coins, which are the principal measures of property, should be composed of one metal only; that this metal should be gold (being that in which the principal payments in England are made); and that the expense of fabrication should be taken out of the silver and copper coins." These principles were made the basis of the new regulations embodied in the act 56 Geo. III. c. 68; and the existing state of the British coinage

is as follows:

is as follows:—
Gold is issued in pieces termed sovereigns (of 20 shillings) and half-sovereigns; the issue of double sovereigns is also authorized, but none are in circulation. These are coined at the rate of 1869 sovereigns from 40 troy pounds of standard metal; hence gold is minted at £3, 17s. 10½d. per ounce, and the full weight of the sovereign is 5 dwts. 3°274 grains. The sovereign of 5 dwts. 2½ grains is, however, a legal tender, and the others in proportion.

Silver is issued in crowns (of 5 shillings), half-crowns, shillings (of 12 pence), sixpences, and groats or fourpences; a few pieces for 3d., 2d., and 1d., called Maundy money, are also made for the purpose of distribution as alms by the sovereign, but they are not in general circulation. These are all coined at the rate of 66 shillings from one pound of standard metal; hence silver is minted at 5s. 6d. per oz.; being an increase of 4d. per oz. from the rate prior to 1816, which was 5s. 2d.; and the full weight of the shilling is 3 dwts. 15 grains and 3-11ths.

Copper is issued in pennies, halfpennies, and farthings, at the rate of £224 per

Copper is issued in pennies, halfpennies, and farthings, at the rate of £224 per m, or 24 pence from 1 lb. avoird. of metal.

The Remedy of the Mint, or allowance for the fallibility of workmanship, in regard to standard weight and fineness, is, for gold coins, 12 grains per lb. in the weight, and 1-16th of a carat in the fineness; for silver, 1 dwt. per lb. in the weight, and the same in the fineness; and for copper, 1-40th of the weight.

No Seignorage is exacted on gold coins, as they are minted at the market-value of that metal; but on silver coins a seignorage is at present levied of about 10 per cent. (the market-price being about 5s., and the mint price 5s. 6d. per oz.); while on copper coins it amounts to more than 100 per cent. It was enacted, however,

that silver coins shall be a legal tender for 40s. only at one time,—copper coins for 12 pence only,—and "that gold coins shall be in future the sole standard measure of value and legal tender for payment, without any limitation of amount."

The amount of money coined in the 23 years 1816-1838 has been: Gold, 16,119 double sovereigns; 54,964,695 sovereigns; 3,526,451 half-sovereigns: Silver, 1,849,905 crowns; 31,051,938 half-crowns; 94,339,080 shillings; 52,915,235 sixpences; 87,412,938 fourpences: Copper, 21,450,240 pence; 23,304,640 half-pence; and 41,782,270 farthings; besides Maundy money, and small coins for the colonies. The total amount of coin in circulation in the United Kingdom at present is estimated to be about 440 000 000 mated to be about £40,000,000.

The loss on coins by abrasion has been variously estimated. According to experiments made at the Mint in 1833, the waste per cent. per annum appears to be, on sovereigns, from 9d. to 10½d.; on half-sovereigns, from 1s. to 1s. 6½d.; on half-crowns, from 2s. to 3s.; on shillings, from 2s. 3d. to 6s.; and on sixpences, from 7s. to 8s. These results, making allowance for the greater use of some coins than others, confirm the general estimate that gold possesses about four times the durability of illustration. bility of silver.

The coining of money forms one of the exclusive prerogatives of the crown, and the counterfeiting of it constituted formerly the offence of high treason. At present the integrity of the coinage is guarded by the act 2 Wm. IV. c. 34, under which persons counterfeiting coin, or impairing it, are punished with transportation or imprisonment. Penalties are also imposed on those uttering false coins,—having

according to the assayer's report of their purity. These reports are made in reference to the money-standards already mentioned; and the comparative difference of the metal assayed is called its Betterness or Worseness: thus, gold 23 carats 2 grains fine, is reported,—Better 1 carat 2 grains; and gold 20 carats,—Worse 2 carats: Also silver 11 oz. 4 dwts. fine, is reported,—Better, 2 dwts.; and silver 10 oz. fine,—Worse 1 oz. 2 dwts. The calculation of the quantity of standard gold or silver that could be obtained from the full weight of the given metal, according to the assay report of its purity, is termed the Standarding of Gold and Silver. Gold is valued either from the full weight, by a price varying according to its purity,—by the market-price per oz. standard, from the quantity of standard metal, or by the fixed mint-price; the latter being the usual rate for determining the intrinsic value of foreign coins as money. Dollar silver is usually sold by the full weight at a variable price per ounce ; and other silver by the standard weight, at a variable price per ounce standard. Silver coins, however, are usually valued, in commercial works and for ordinary purposes, from the standard weight at the fixed price of 5s. per ounce standard,—a rate which varies little from the market-price of late years. Practical formulæ for standarding gold and silver, for ascertaining their value under different circumstances, and for the various other calculations which occur in bullion operations, will be found stated with much nextness in Mr Tate's "Manual of Foreign Exchanges" (p. 134-224). The following tables, compiled from that work, show the assays, weight, purity, and value of the principal foreign gold and silver coins, compound the former at the rate of £3:17:10½, and the latter at 5s. per ounce, British standards:—

TABLE OF THE PRINCIPAL FOREIGN GOLD COINS.

Country.	Names.	^	port.		We		Su	indard eight,	Pure Gold.		lue in rling.
Austria	Half-sovereign	WB	car.	87. 04	dwt.	14 51	dy 3	vt. gr. 13-75 10-00		13	d. 10:95 4:93
Bavaria	Max d'or	w	3	2	4	4	3	11.80	76.82	13	7.16
Denmark East Indies		W	0	0 1	7	12	7	5·83	164-53	16 29	6-25 1-44
France		W	0	14	9	20	9	1.52 15.97	89-39 212-64	15 37	9·96 7·63
Hanover Holland	George d'or		Ó	뱘	4	64 51	4	5-04 9-56	92-62 52-77	16	4-79
Portugal.		w	o tand	14	34	7‡ 12	ā	5-68 12-00	93-21 759-00	16	5-97 4-01
Russia	Joannese	W	0	01	9	64	9	5.60	203-37	35	11-95
Spain	Half Imperial	w		04	17	3 <u>1</u> 81	18	3·50 11·20	91-90 362-26	16 64	1·71 1·40
United States, America	Half Eagle	W	0	28 I	5	9 1	5	6-06	115-56	20	5.40

TABLE OF THE PRINCIPAL FOREIGN SILVER COINS.

Country.	Names.	A	por	Ro-	M.	all Spr		adard alght			ne in rling
Austria Denmark Rest Indies France Hamburg Hanover Hioland Mexico Naples Pertugal Prussla Rome Russia	Species thaler of 2 fi Rigsbank dollar. Company's rupes. 5 francs. Current mark. F. sweydrittel Guilder or florin Dollar 1833. Ducat del regno Dollar 1833. Crusado novo. Thaler. Scudo. Silver ruble. Pillar dollar.	- ************************************	000000000000000000000000000000000000000	dwr.	-	7 19 19 19 21 19 9 9 11 18	16 8 7 15	7L gr. 609 1894 10:37 18:73 18:73 18:73 6:91 22:14 23:06 19:47 11:63 18:98	grains. 360-63 195-12 165-00 347-17 106-13 199-32 148-01 376-22 295-00 375-68 198-92	1 4 3 4 2 4 3 4 3 4 3 4	d- 0.76 9:35 10:99 10:91 2:34 9:93 8:90 9:84 3:86 2:76 9:88 10:87 9:43 1:43 2:35
United States, America Venetian-Lombardy	Dollar	W		8	17	8 174	16 16	17-01- 4-84		4	2·12

COIR, a kind of cordage made, in Ceylon and other places, out of the fibrous covering of the cocos-nut. It is much esteemed in India, and on some occasions preferred to that of Europe from its advantage of floating on the surface of the water. It forms a considerable article of export from Ceylon, and nearly 4000 cwts. are annually entered for home consumption in the United Kingdom.

COKE is an impure carbon procured from the distillation of pit coal, and gene-

rally obtained from coal-gas retorts. It has a porous texture, and more or less lustre. It is employed as fuel, and produces an intense and steady heat.

COLCOTHAR, or CROCUS, a reddish powder, obtained by the decomposition of green vitricl. It is an oxide of iron, and is used as a paint, and for polishing iron and glass.

COLLISION OF VESSELS. Injuries occasioned by one ship driving against or running foul of another, are frequently the foundation of claims and disputes on policies of insurance and otherwise. Such injury is held to be by a peril of the sea, and the amount is recoverable under an ordinary policy. With regard to the policies of insurance and otherwise. Such injury is held to be by a peril of the sea, and as such, the amount is recoverable under an ordinary policy. With regard to the ultimate incidence of the lose, it must come on the party whose misconduct has occasioned it, and there can be no recovery where the mischief is caused by the culpable negligence of the master or mariners of the vessel insured. Where neither party is to blame, the rule in this country is that the loss rests where it lights; by the maritime codes of some countries, the loss is, in such circumstances, divided between the owners of the two ships. (Marshall on Insurance, 494, 495.) COLOCYNTH, COLOQUINTIDA, on BITTER APPLE (Fr. Colquinte. Ger. Coloquintt. It. Coloquintida. Pers. & Arab. Hunsil), the fruit of an annual plant of the gourd kind (Cucumis cologniths) found in Turkey and Nubis. It is about the size of an orange, smooth and vellow, but is peeled and dried before

plant of the goard kind (Cucumus condynas) touch in Turkey and Ruins. It is about the size of an orange, smooth and yellow, but is peeled and dried before being imported, when it becomes whitish, very light, dry, and spongy, with a weak and disagreeable smell, and an intensely bitter nauseous taste. The medullary part, freed from the seeds, furnishes an extract which is in common use as a pur-

gative. About 16,000 lbs. are annually entered for home consumption in the United Kingdom.

COLOMBIA, the name given to a republic which was formed, in 1819, of the COLOMBIA, the name given to a republic which was formed, in 1819, of the northern part of South America, formerly divided under Spain into the viceroyalty of New Granada, comprising the antiencia of Quito, and the captain-generalship of Veneruela. In 1831, this republic was separated into the three republics of New Granada, Veneruela, and Ecuador, or Quito,—the territories of which correspond nearly with the former divisions. During the existence of the republic of Colombia, it raised the following loans in London, namely, £2,000,000 in 1822, contracted with Meesrs B. A. Goldschmidt, & Co., at 83 per cent. These loans bear interest at 6 per cent.; but none has been paid since 1826. The bonds for the first loan being red, and those for the other black, they are so distinguished in the money market. According to arrangements made at Bogota in January 1835, the amount of the loans was partitioned among the Colombian republics as follows:—New Granada to bear 50 parts, Venezuela, 283 parts, and Ecuador 213 parts. The branches of revenue appropriated by the late government, as a provision for the debt, consisted of 4th of the customs duties, the whole of the duties levied on gold and silver, and the revenues from the tobacco monopoly; these are now under charge of the separate republics, but the recent political dissensions have rendered them much less productive than formerly.

COLONY, a territory possessed and cultivated by a body of people drawn from a distant country to which it is politically united. The term, however, is used vaguely, to express an outlying part of the population of the mother-country, or an enthvirse territory becomes

vaguely, to express an outlying part of the population of the mother-country, or an outlying territory belonging to it, either in conjunction, or any of the two by itself. In both ancient and modern times colonization has proceeded from the same resent. In both ancient and modern times commenced has proceeded from the same causes, namely, commercial enterprise, political commotion, the desire of conquest, or the natural overflowing of population. The earliest of the ancient colonies were those formed by the Canaanites or Phoenicians, on the shores and islands of the Mediterranean, and more particularly on the N. coast of Africa; these owed their origin in most cases to a spirit of commercial adventure. The Greek colonies were origin in most cases to a spirit of commercial adventure. The creek colonies were formed partly from similar motives, but chiefly from the dissensions and superabounding population in the parent states. On the other hand, the Roman colonies were military stations, formed solely for the purpose of bridling subjugated provinces. These last always maintained an intimate connexion with Rome; but the Phenician and Grecian colonies appear in most cases to have been independent states,—though a strong feeling of regard generally characterized their intercourse with their parent countries.

The spirit of colonial enterprise dormant in the middle ages, was revived in the 13th

The spirit of colonial enterprise dormant in the middle ages, was revived in the 13th century by the Italian republics, Genoa, Pisa, and Venice, which formed settlements in various parts of the Mediterranean and Levant. The modern European colonies, in various parts of the Mediterranean and Levant. The modern European colonies, however, owe their origin to the ambition of the maritime states to participate in the Indian commerce formerly conducted by way of the Red sea, and monopolized by the Venetians. The discovery of the compass prompted navigators to attempt this by new channels. The Portuguese, after repeated failures, at length ascertained the eastern passage in 1497, when the Cape was doubled by Vasco de Gama; the Spaniards attempted a westerly course which led to the discovery, by Columbus, of the West Indies in 1492, and of South America in 1498; while the

English, restrained by the pope from profiting by the Portuguese and Spanish discoveries, despatched Sebastian Cabot by the north-west, a route which led him to Newfoundland and North America in 1497. The progress of commercial enterprise in the East is described under the head East India Company. In South terprise in the East is described under the head East India Contant. In South America, Columbus's discoveries were followed by the conquest of Mexico in 1519 by Cortex, and of Peru by Pizarro and others in 1531. Braxil was settled by the Portuguese in 1500. The West Indian Islands, notwithstanding the papal grant in favour of Spain, were occupied by various nations; Hispaniola or Hayti in 1496; Jamaica, about 1510; Cuba, 1511; Porto-Rico, 1514; Barbadoes, 1605; and the others at later periods. The progress of colonization was much slower in N. America; Virginia was taken possession of by Raleigh in 1583, but soon after abandoned; and the first permanent English settlement, which was at Jamestown in the same state, was not formed until 1607. The colonization of N. America afterwards proceeded rapidly, particularly during the disturbances in England which attended and followed the dethronoment of Charles I.; the cavaliers emigrating to Virginia, the Puritans to New England, and the Quakers to Pennsylvania. In 1776, the attempt of Great Britain to tax the American colonists for the purposes of the general government led to the political separation of the "United States" from the mother-country; and in 1810, revolutionary movements occurred in S. America which resulted in the emancipation of the Spanish colonies on that continent. The subsequent progress of these countries has been illustrative of the treatment progress and the form the august state. The English colonies of the terminal progress of these countries has been illustrative of the treatment progress of these countries has been illustrative of the treatment progress of these countries has been illustrative of the treatment progress of these countries has been illustrative of the treatment progress of these countries has been illustrative of the treatment of the state of the tre subsequent progress of these countries has been illustrative of the treatment previously received by them from the parent states. The English colonists, allowed free institutions, and a more extensive market for their surplus produce than the colonies of any other nation, acquired habits of self-government and industry; and their career, since becoming independent, has been peaceable and prosperous to an extent which now places them in commercial greatness above all countries of the world except Britain. The Spanish colonists on the other hand, oppressed with world except britain. The Spanish colorings on the other hand, oppressed which heavy taxes and crown monopolies, were subjected to a despotic government, under which they were excluded from all offices of emolument; education also was proscribed, and the Inquisition established. Under such training, the people became ignorant and deprayed; and having adopted republican institutions, for which they were unfitted, have, by tunniltuous and frivolous contentions, so far paralyzed industry and dissipated their resources, that these fine countries are now, with the exception perhaps of Chili, even much less productive than when under the wretched

exception perhaps of Chili, even much less productive than when under the wretched dominion of the mother-country.

Notwithstanding the separation of the United States, the British colonies remained of considerable extent; and many acquisitions having been since made, both by conquest and settlement, they now far exceed in importance those of all other states. Including fortified stations and other dependencies, Great Britain now possesses:—In Europe; Gibraltar, Malta, Gozo, and Heligoland: North America; Canada, Hudson's Bay Territory, Nova Scotia, New Brunswick, and the islands of Cape Breton, Prince Edward, and Newfoundland, together with the Falkland group off S. America: West Indies; Jamaica; the Windward Islands, Barbadoes, St Vincent, Grenada, Tobago, St Lucia, and Trinidad; the Leeward Islands, Antigua, St Christophers, Montserrat, Nevis, Anguilla, Dominica, and Virgin Isles; Bahama Islands; Bermuda Islands; Demerara, Berbice, and Essequibo in Guiana; and the settlement of Honduras in Central America: Africa; Cape of Good Hope; settlements in Guinea and Senegambia, including Bathurst, quito in Guiana; and the settlement of Honduras in Central America: Africa; Cape of Good Hope; settlements in Guinea and Senegambia, including Bathurst, Sierra Leone, and Cape Coast Castle; the islands of Fernando Po, St Helena, Ascension, and Tristan d'Acunha; the Mauritius, and other small islands in the Madagascar Archipelago: Australasia; New South Wales; Swan River, and King George's Sound; South Australia; Van Diemen's Land; and New Zealand: Asia; the island of Ceylon. The immense territory of the East India Company in Hindostan, with their dependencies, Singapore, Penang, Malacca, and Aden, are not usually included in the list of British colonies.

The foreign possessions of Socies at present consist of Cuba Porto-Rico the

nsually included in the list of British colonies.

The foreign possessions of Spain at present consist of Cuba, Porto-Rico, the Philippines, the Canaries, and settlements in Morocoo: Portugal has the Madeiras and the Cape de Verde Islands; Angola, Benguela, Loango, and Mozambique in Africa; Goa in India; Macao in China; and a settlement in the island of Timor; France has the West Indian Islands Guadaloupe, Martinique, Marie-Galante, and Descada; Cayenne in Guiana; the small islands of St Pierre and Miguelon in the vicinity of the Newfoundland fishing-ground; Algiers, Senegal, and Goree in Africa; the isle of Bourbon; St Marie in Madagascar; and Pondicherry and Chandernagore in India: Holland possesses Java, the Moluccas, and settlements in Sumatra, Celebes, Borneo, Banda, and other eastern islands; the West India

Islands Curaçao, St Eustatius, Saba, and part of St Martin; and Dutch Guiana: Denmark has Iceland, settlements in Greenland, the West India Islands St Croix, St Thomas, and St John; Christiansburg and other possessions in Guinea; and Tranquebar and Serampore in India: Sweden has the West India Island of St Bartholomew

European Colonial Policy.—Every European power has endeavoured more or less to monopolize to itself the commerce of its colonies; but the manner in which this monopoly has been exercised by different nations has been very different. this monopoly has been exercised by different nations has been very different. Some have given up the whole to an exclusive company; some, without establishing such a company, have confined the whole to a particular part of the mother-country; while others have left it free to their subjects at all ports. The last has been the general policy of Great Britain, which has been characterized by Dr Smith as comparatively more liberal than that of other European powers (Wealth of Nations, b. iv. c. 7). At an early period, indeed, the English colonists were allowed to follow their own interest in their own way; but on their commerce becoming of importance it was placed under regulations calculated to secure their consumption of English manufactures, the employment of English ships, and a preference to the English market for their surplus produce. In the exportation of their surplus produce, however, it was only with regard to certain commodities that the British colonies were confined to the market of the mother-country. These commodities having been enumerated in the act of navigation (12 Ch. III. c. 18) and in that the British colonies were confined to the market of the mother-country. These commodities having been enumerated in the act of navigation (12 Ch. II. c. 18) and in some other subsequent acts, were upon that account called enumerated commodities; the rest, called non-enumerated, could originally be exported directly to all parts of the world, provided it were in British or colonial ships; but they were afterwards (6 Geo. III. c. 52) confined, as to the European market, to the countries that lie south of Cape Finisterre, which, not being manufacturing countries, we were less jealous of the colonial ships carrying home from them any manufactures which could interfere with our own. The most perfect freedom of trade was permitted between the British colonies of America and the West Indies, both in the enumerated and in the non-enumerated commodities. Great Britain, too, while she confined to her own market some of the most important productions of the colonies, so in compensation she gave to some of them an advantage in that market, sometimes by imsation she gave to some of them an advantage in that market, sometimes by imposing higher duties upon the like productions when imported from other countries, and sometimes by giving bounties upon their importation from the colonies. The comparative liberality of England, however, towards the trade of her colonies was confined chiefly to what concerned the market for their produce either in its rude confined chient to what concerned the market for their produce camer in he rune state, or what might be called the very first stage of manufactures. The more advanced or more refined manufactures even of the colony-produce were reserved to the merchants and manufacturers of Great Britain; and their establishment in the colonies was prevented sometimes by high duties, and sometimes by absolute probabilitions. But these verticities thange salidab and twannical did not materially

colonies was prevented sometimes by high duties, and sometimes by absolute prohibitions. But these restrictions, though selfish and tyrannical, did not materially affect the prosperity of the colonies, as in all newly settled countries labour yields the most profitable return when applied to the cultivation of the soil.

The colonial policy of Great Britain, though perhaps more liberal than that of other states, was thus wholly influenced by the narrow-minded principles which characterize the "mercantile system." In modern times, it has undergone important modifications, but it still contains much that is exceptionable. The present colonial tariff is so framed that the West India colonies are obliged to bring provisions and lumber from British America in British ships, though these articles might be obtained cheaper direct from the United States: they are also prevented from refining sugar, though this is an operation which they themselves could conduct with much advantage in the colonies. In return for these sacrifices, and the discriminating duties imposed in favour of British manufactures, the colonies are, as afterwards explained, virtually allowed the monopoly of the home-market for the sale of their produce. Under certain conditions of reciprocity as to the vessels employed, the colonies are allowed to ship their produce to all parts of the world; but ployed, the colonies are allowed to ship their produce to all parts of the world; but their intercourse with foreign countries is of little importance, owing to the superior facilities for trade possessed by the mother-country.

The existing Regulations of the British Colonial Trade are chiefly embodied in the act 3 & 4 Wm. IV. c. 59, of which the following is an abstract:—

§ 1. Act 6 Geo. IV. c. 114, and succeeding acts consolidated.

British ships) exported from any of the British possessions in America by sea, from or to any place other than the United Kingdom, or some other of such possessions, under an offerfeiture, to, nor (except the produce of the fisheries in except at the several "free ports." (These are

	If imported from any other place, to be
also be established for limited purposes.	deemed foreign, and charged duty as
Proving Shine, \$5.5. 6. The privileges granted	such.
by the Navigation Law to foreign ships shall be	Spirits imported into Canada, the pro-
Foreign Stips, §§ 5, 6. The privileges granted by the Navigation Law to foreign ships shall be limited to the ships of those countries which, having colonial possessions, shall grant the like	Spirits imported into Canada, the pro- duce of any B. P. in S. America or W.
having colonial possessions, shall grant the like	Indies, and imported from any B. P.
DLIAISES OF FLEGING MITH PRIORS DOMESTICE FOR	in America, or from the U. K., the
British ships, or which, not having colonial pos-	gallon 0 0 6
medons, shall place the commerce and navigation	Imported from any other place, to be deemed foreign, and charged duty as
of this country, and of its possessions abroad, upon the footing of the most favoured nation,	such.
unless its shall be otherwise provided by order in council. But nothing contained in this act shall affect the acts 4 Geo. IV. c. 77, and 5 Geo. IV. c. I, for regulating the trade of foreign ships.	Note.—When imported from the U.K.,
council. But nothing contained in this act shall	this duty is not to be abated upon the
affect the acts 4 Geo. IV. c. 77, and 5 Geo. IV.	ground of any duty under any colonial
c. 1, for regulating the trade of foreign ships.	law.
Promotions and Asserticions, 97. Indistreme	Duties payable upon Commodities, not being of the Growth, Production, or Manufacture of the United Kingdom, or of any of the British
sorts of goods described in the table following are	the Growth, Production, or Manufacture of
prohibited to be imported into the British pos-	Possessions in America, imported into any of
sessions in America, or shall be so imported only under the restrictions mentioned in such table:—	the British Possessions in America.
Table of Prohibitions and Restrictions.	Imported into the British Possessions in the
Gunpowder, arms, and ammunitions, or utensils	West Indies, or on the continent of South
of war, are prohibited to be imported, except	America, or into the Bahama or Bermuda
of war, are prohibited to be imported, except from the U. K. or from some other B. P.	Islands, vis. wheat floor, the harrel 40 5 0
Tea prohibited, except from the U. K., or from some other B. P. in America, unless by the East India Company, or with their license, during the continuance of their exclusive right	But if imported from any B. P. in N.
some other B. P. in America, unless by the	America, or from the warehouse in the U. K. Free.
East India Company, or with their license,	the U. K Pres.
of trade.	Shingles, not more than 12 inches in length, the 1000
Fish, dried or saited, and oil, blubber, fins, or	Shingles, more than 12 inches in length,
aking the produce of creatures Name in the	the 1000 0 14 0
akins, the produce of creatures living in the sea, are prohibited, except from the U. K. or some other B. P., or unless taken by British ships fitted out from the U. K. or from some	Dut II Imported from one D. D. In M.
some other B. P., or unless taken by British	America, or from the warehouse in the U. K. Free.
ships fitted out from the U. K. or from some	the U. K Free.
B. P., and prought in from the hinery, and	Red oak staves and headings, the 1990 . 0 15 0
except herrings from the Isle of Man.	But if imported from any B. P. in N.
Coffee, sugar, molasses, and rum, being of foreign	America, or from the warehouse in
production, or the production of any place	the U. K Pree.
shorter one mobilited to be imported into	White oak staves and headings, the 1000 0 12 6 But if imported from any B. P. in N.
any R P on the continent of R America or	America or from the warehouse in
production, or the production of any place within the limits of the Rast India Company's charter, are prohibited to be imported into any B. P. on the continent of S. America or in the W. Indies (the Baharnas and Bermudas	America, or from the warehouse in the U. K
not included), except to be warehoused for	With the state of
	Pich bine himber, one inch thick, the
exportation only; and may also be prohibited	Pitch pine lumber, one inch thick, the
not included), except to be warehoused for exportation only; and may also be prohibited to be imported into the Bahamas or the Ber-	Real of Improved drawn and R. R. in W.
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And further, the amount of any duty	otherwise charged with duty, and not berein declared to be free of duty, for
payable for the time being on rum of	herein declared to be free of duty, for
payable for the time being on rum of the B. P. in S. America or W. Indies. N.B.—Rum, although British, if im-	every £100 of the value £15 0 4
N.B.—Rum, although British, if im-	
ported from any H. P. in which foreign	low, raw hides, rice, corn and grain unground, biscuit or bread, meal or
rum is not prohibited, is treated as foreign, unless it had been warehoused,	unground, biscuit or bread, meal or
foreign, unless it had been warehoused.	flour except wheat flour, fresh meat,
and exported from the warehouse.	fresh fish, carriages of travellers . Fres.
Wine in bottles, the tun \pounds 7 7 0 And further, for every £100 of value 7 10 0	Wheat flour, beef and nork, hams and
And further, for every £100 of value 7 10 0	bacon, wood and humber, imported
And on the bottles, the dozen 0 1 0	
Hottled in and imported from the U. K.,	Wood and lumber, imported into New
for every £100 of the value . 7 10 0	Brunswick, Nova Scotia, or Prince
The bottles Free.	Edward Island Free.
Wine not in bottles, for every £100 of	Hay and straw, fresh fruit and vegetables,
value 7 10 0	mit, and cotton-wool . Free.
Imported into B. P. in N. America from	Goods the weeduce of please within the
	Goods, the produce of places within the limits of the E. I. Co.'s charter, im-
Gibraltar or Malta, subject to no higher	named from these places on from the
duty than if imported from the U.K.,	ported from those places, or from the U. K., or from some place in the British dominions
via one-tenth of the duty remitted. Coffee, cocca, and sugar, the cwt. 0 5 0 Molasses, the cwt. 0 3 0 And further, the amount of any duty payable for the time being on coffee,	Delta, or from some place in the
Comes, cocoa, and sugar, the cwt U 5 U	British dominions . Free
MOINESEE, IDE CWI. U 3 9	Herrings taken and cured by the inha-
And further, the amount of any duty	UNION OF THE 1818 OF MAN, and m-
payable for the time being on collee,	ported from thence Pres.
duce of B. P. in S. America or W. Indies.	Lumber, the produce of and imported
duce of B. P. in S. America or W. Indies.	from any B.P. on the W. coast of Africa Free.
Clocks and watches, leather manufac-	Any sort of craft, food and victuals ex-
Clocks and watches, leather manufac- tures, lines, musical instruments,	Lumber, the produce of and imported from any B.P. on the W. coast of Africa Any sort of craft, food and victuals ex- cept spirits, and any sort of clothing,
wires of all sorts, books and papers,	snd implements and insterns it and
silk manufactures, for every £100 of	necessary for the British fisheries in
the value 30 0 0	America, imported into the place at or
Glass manufactures, scap, refined sugar, sugar candy, manufactured tobacco,	from whence such fishery is carried on Free. Drugs, gums or resins, dye-wood and hard-wood, cabinetmakers' wood, tor-
sugar candy, manufactured tobacco.	Drugs, gums or resins, dve-wood and
and cotton manufactures, for every	hard-wood, califnetmakers' wood, tor-
£100 of the value 90 0 0	toisesbell, hemp, flax, and tow . Free,
Alabaster, anchovies, argol, anissed.	toiseshell, hemp, flax, and tow . Free. Seeds, wheat flour, fruits, pickies, woods of all sorts, oakum, pitch, tar, tur-
Alabaster, anchovies, argol, aniseed, amber, almonds, brimstone, botargo,	of all sorts, calcum, pitch, tar, tur-
horwood, currents, caners, casescoo.	nentine, ochres, hrimstone, sulphur,
boxwood, currants, capers, cascacoo, cummin seed, coral, cork, cinnabar, dates, essences of bergamot, lemons,	pentine, ochres, brimstone, sulphur, vogetable olls, burr-stones, dog-stones,
dates emences of horomost lemons	hors cork seen teniore mones.
cases, essences or perganice, remons,	i wohet corwi megot metrocet shoridat
moses elivery engages invention and	envisore chases alder way enlose
Poses offrom oranges is vender and	hops, cork, sago, tapioca, sponge, sausages, cheese, cider, wax, spices, and tallow imported direct from the
Poses offrom oranges is vender and	sninges, cheese, cider, wax, spices, and tallow, imported direct from the
Poses offrom oranges is vender and	and tallow, imported direct from the warehouse in the U. K
Poses offrom oranges is vender and	and tailow, imported direct from the warehouse in the U. K Free.
Poses offrom oranges is vender and	and tailow, imported direct from the warehouse in the U. K Free.
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berein before mentioned or referred to, passed prior to the 18 Geo. III. c. 12, shall be applied for the purposes of those acts: Provided no greater proportion of the duties imposed by this act, sail services, and the sail device spectrum come before the cupum any article which is subject also to duity under any of the said eact, or subject also to duity under any of the said eact, or subject also to duity under any of the said eact, or subject also to duity under any of the said eact, or subject also to duity under any of the said eact, or subject also to duity under any of the said eact, or subject also to duity under any of the said eact, or subject as to the said eact, or subject as the said to the said eact, or or account of such focus of the said each of

shall declare on eath what is their true values in such colony; and the value so declared shall be deemed to be the true value upon which the duties shall be paid. And if importer streets to make the pay such duty, the goods may be sold.

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And of the paid of the process of the pay such duty, the goods hall be imported into any streets of the process of the proces report of the ship, by which the importation or entry is suthorized, nor unless the goods shall have been properly described in such entry by the characters according to which such goods are charged with duty or may be imported; and any goods taken out of any ship or warrant not agreeing in all such respects, shall be desired to be goods landed or taken without due entry, and forbited.

Certificate of Productions, § 25. Before any sugar, coffee, occes, or spirits, shall be shipped for exportation in any B. F. in America or in Manritius, as being the produce of such possession, the proprietor of the estate on which such such respects, shall be desired to be good indeed to taken without due entry, and forbited.

So one of the removal of any goods, land or the sum of the estate, the description and quantity of the goods, the packages, with their marks and numbers, and the name of the person to whose charge, at the place of abipment, they are to be sent; and the person entering and shipping such posses shall deliver such affidavit is to the collector or comptroller, or other proper officer, and shall subscribe a declaration before him, that the goods to be shipped by virtue of such entry are the same are mentioned in such affidavit; and the master of the ship in which such goods shall be laden shall, before clearance, make and subscribe a declaration before the collector or comptroller, that the goods shipped by virtue of such entry are the same as are mentioned in such affidavit; and the master of the ship in which such goods alsall be laden shall, before clearance, make and antheorities a declaration before the collector or comptroller, and thereupon the collector or comptroller, and destination of the goods; and if any sugar, the produce of some B. P.; and sating forth the mane of the exporter, ship, master, and destination of the goods; and if any sugar, coffee, cocca, or spirits, be imported into any B. P. in America, as being the produce of some b. P.; and sating forth the mane of the exporter, ship, master,

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tificate thereof, setting forth the name of the ship in which the wine is to be exported, and its des-

no mel Bilands, § 86. Any person who is about ore from Generacy, Jercey, Alderney, or to the U. K., or to any B. P. in America, the produces of any of those islands, or actured from materials which were the e thereof, or of the U. K., may go before strate of the island, and make a declara-at such goods are of such produce, or ma-ure, and such magistrate shall administer palaration; and thesement. the generacy-

the island from which the goods are to be exported, shall, upon delivery of such declaration, grant certificate of the proof contained therein, stating the ship in which, and the port to which, in the U. K., or in any such possession, the goods are to be exported; and such certificate shall be the proof comment to be produced at such portions the proper document to be produced at such portions therein are of the produce or manufacture of such islands respectively.

§ 87. During the continuance of the E. I. Co. seed the such as t

no merchandise from Gre on pain of forfeiture of a suuff, respectively, toget the vessel, and the appar 8 no. W.

Colonial Monopoly of the Home Market.—The British colonies, as already mentioned, were virtually allowed a monopoly of the home market for the sale of the principal articles of their produce. This was effected by fixing in the British tariff the duties on commodities imported from the colonies at a mu foreign countries. The following is a table of the chief differential duties in favour of the colonies:—

	Duties.						De	.	lies.				
	Pe	-	P .	C	the later	2		•	·	P.	e	-	-
Raw sugar	£ 3 1 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	L33125520	d. 0 9 8 6 6 0 11 1	£100000	8. 4 9 0 9 2 10 0 free	d. • 0 6 6 9 0 4	Rice	0	15 0 12 18 0 3 15 10	400008ce0	\$100000000	1 0 1 1 0 0 5 10	d01001100
Tallow .cut. Boap, hard		3 0 11	9 8	1	8 3	0	Ashes	000	0 18	6	0	free 0 1	2

N. B. Stated enalugive of late addition of 5 per cent.

Besides these a protective duty of about 100 per cent. was imposed on hides and skins; furs also were protected, if from North America (chiefly Hudson's Bay). Spices, and in short all tropical productions, had likewise high differential duties in favour of the colonies.

The practical effect of these protective duties was, until lately, the complete exclusion from our markets of many of the foregoing articles when imported from

foreign countries, and especially the great staples of our West India islands; but foreign countries, and especially the great staples of our West India islands; but within the last few years, owing, on the one hand, to the diminished production of these colonies since the abolition of negro slavery, and, on the other, to the increased consumption of this country, coffee and sugar of foreign growth have been entered for home consumption in considerable quantities,—the coffee by an evasion of the law that was practised by transhipping it at the Cape of Good Hope, which, being within the limits of the East India Company's charter, allowed it to be introduced at a modified duty of 9d., instead of 1s. 3d. per lb.; and sugar, in consequence of the great rise of price, from the circumstances just mentioned, having more than counterbalanced the extra duty payable on the foreign articles. But before these eperations could be carried on to advantage by the importer, the rise of price has been necessarily so great that the British consumer has had to pay nearly double what is charged for the same articles on the continent of Europe. The differential duty upon timber was also highly injurious, from its having the effect of differential duty upon timber was also highly injurious, from its having the effect of substituting the inferior kind obtained in North America for the superior article of the north of Europe. [Coffee. Sugar. Timber.]

The injurious operation of the former system of legislation in regard to the

trade of the colonies, and in particular the hardship which it imposed upon the British consumer, long attracted the attention of the public, as is proved by the British consumer, long attracted the attention of the public, as is proved by the Report made in the year 1840, by the Select Committee of the House of Commons upon Import Duties. The evidence collected by the committee was so conclusive as regards the vicious effects of the present system, that they felt no difficulty in urging its immediate modification, if not repeal. "Your committee," the Report bears, "farther recommend, that, as speedily as possible, the whole system of differential duties and of all restrictions should be reconsidered, and that a change therein he effected in such a suppose that existing intendered and that a com or conscience and or all restrictions should be reconsidered, and that a change therein be effected in such a manner that existing interests may suffer as little as pessible in the transition to a more liberal and equitable state of things. Your committee is persuaded that the difficulties of modifying the discriminating duties which favour the introduction of British colonial articles would be very much abated if the colonies were themselves allowed the benefits of free trade with all the world." (Report, p. vi.)

much abated if the colonies were themselves allowed the benefits of free trade with all the world." (Report, p. vi.)

The Advantages of Colonies have been exaggerated by some, and perhaps too much underrated by others. Such establishments relieve the parent state of its superabundant population, and afford the chance of acquiring property to many who have no means at home. On the other hand, they receive from the parent state that protection and countenance which is essential to their progress as civilized communities. But in a commercial point of view, the foundation of their reciprocal benefits is, that they afford good markets to each other; while the identity of tastes, habits, and opinions, renders the intercourse of business between them more easy, agreeable, and steady than between nations of different origin. It is, however, indispensable to the continued existence of this mutual interest and affection, that the commercial intercourse between the mother country and her colonies should not be placed under restraint: for every restriction, by shutting ont colonies should not be placed under restraint; for every restriction, by shutting out men from some possible source of increased wealth, tends to the impoverishment of a country, and produces ill-will towards the possessor of the exclusive privilege. The monopoly of the markets of the American colonies was one main source of the grudge against Great Britain, which led to their declaration of independence. The preference still retained by England in the markets of her colonies is rather

The preference still retained by England in the markets of her colonies is rather nominal than real, as she is now the cheapest manufacturing country in the world; but it is otherwise with the monopolies of sugar, coffee, and timber, which are preserved in her markets in favour of the colonies, and the continuance of which is, as already noticed, the cause of much dissatisfaction. The amount of indirect taxation on the British consumer, produced by the present discriminating duties in favour of these three descriptions of colonial produce, being estimated in the late Report on Import Duties at from £5,000,000 to £8,500,000.

The colonial expenditure of Great Britain, for civil, naval, and military purposes, after deducting repayments from colonial revenues, was, in the year 1835-6, the latest period for which it is shown in the public accounts (Par. Paper, 1840, No. 632), as follows:—Military and Maritime Stations: Gibraltar, £139,830; Malta, £10,818; Cape of Good Hope, £242,907; Mauritius, £78,284; Bermuda, £91,446; Fernando Po, £510; Ascension, £4907; Heligoland, £1016; Ionian Islands, £118,855; St Helena, £87,558. Plantations and Settlements: Jamaica, Bahamas, and Honduras, £232,428; Windward and Leeward Islands, including Trinidad and British Guiana, £373,242; Upper and Lower Canada, £221,441; Nova Scotia, New Brunswick, Prince Edward Island, and Newfoundland, £161,234;

Sierra Leone and Gambia, £38,847; Ceylon, £183,805; Western Australia, £12,745. Penal Settlements: New South Wales and Van Diemen's Land, £583,501; general charges, £23,449. Total, £2,606,483. This, however, is exclusive of the share of the pensions and other similar expenses fairly chargeable to the account of those establishments.

those establishments.

It does not fall within our plan to consider the much agitated questions as to the policy which a state should pursue in the formation of colonies, and in their government. On the former head, however, it may be observed that the recent policy of Great Britain has been to recognise the self-supporting system of emigration, first broached by Mr Wakefield in his "England and America," and afterwards developed by him in the Colonial Land Committee in 1836, namely, the plan of making unappropriated lands a fund for the free importation of labouring emigrants, and the importation of such emigrants the source of value to those lands, and an attraction for capitalists. [EMIGRATION.] This plan has been followed in South Australia, and in the settlement of New Zealand, the youngest of our colonies. As to government, the British colonies have, in general, local legislatures elected by the people, and a governor and council named by the crown; and in any changes which have recently taken place, an increased disposition has been shown to leave the internal arrangements to the colonists themselves.

A statistical and commercial description of the different colonies will be found under their respective heads, and a further account of their trade generally in the

article COMMERCE

article COMMERCE.

COLOUR TRADE. The manufacture of painters' colours now forms an important branch of the national industry. The tedious and unwholesome process of grinding colours in oil, for house-painting, was formerly accomplished by the hand, and by painters for their own use; but of late the manufacturing chemists have been enabled, by the application of machinery, to supply the articles so cheaply, that the old method is almost entirely superseded. This improvement in the manufacture of colours has led to their now entering pretty largely into the list of exports. In the year 1839, the declared value of painters' colours exported was £236,482. The countries to which they are chiefly sent, are the United States, West Indies, and British America; considerable quantities are likewise shipped to Australia, India, Brazil, and the North of Europe.

The following is a table of the principal substances employed as paints and dyes and for other colouring purposes in the arts:— \$\textit{S}\$

TABLE of substances used for colouring, with their composition.

Blacklead. Native carburet of iron. Blacklead. Native carburet of iron.
Blue black. Charcoal.
Fronk fort black. From calcined less of wins.
Fronk plack. Bone charcoal.
Indian Ink. Lampblack, &c.
Lampblack. Boot of resinous wood.
Marking Ink. Nitrate of silver and sods.
Spanish black. Charcoal from cork.
Writing Ink. Gallosulphate of iron. BLUE.

Anisorp blue. Ferro-sesqui-cyanuret of per oxide of iron and alum. Blue ochre. Subphosphate of iron and earthy

matter.

Blue verditer. Carbonate of copper and lime.

Cobalt blue. Vitrified oxide of cobalt, silica Cobalt blue.

Indigo. From leaves of Indigofera.

Mountain blue. Native carbonate of copper.

Prussian blue. Ferro-sesqui-cyanuret of peroxide of iron.

Oxide of iron.

Royal blue. Same as cobalt blue.

Saxon or Intense blue. Indigo dissolved in sulphuric acid.

Same as cobalt blue. Ultramarins. Bilica, alumina, sulphur, and

Ultramarine (French). Ditto with iron. Wood. From plant Isatis tinctoria.

BROWN.
Asphaltum. Mineral rusin.
Antwerp brown. Ditto.

Bistre. Burnt oil from soot of wood-fire.
Chesnet brown. From the horse-chesnut.
Extract of Lopwood. From the Hamatoxylon
Compectations.
Ivory brown. Bones partially charred.
Munney brown. Mineral resin and animal
matter. matter.

Neutral tini. Sepia, indigo, and madder.

Sepia. From the cuttle-fish.

Sienna (Terra de). Oxide of iron and earthy matter.

Spanish brown. Ditto, moderately calcined.
Spanish brown. Oxide of iron and earthy matter.
Umber. Oxides of manganess and iron, and earthy matter.
Umber (Burnt).
Ditto calcined.
Vandyke brown. Peat, or bog earth. GREEN. Brunnotck green. Preparation of copper.
Chrome green. Pretoxide of chromium.
Emerald green. Arsenite of copper.
Mineral green. Carbonate of copper.
Mountain green. Native ditto.
Sap green. From juice of buckthorn berries.
Scheetes green. Arsenite of copper.
Verdigris. Subacetate of copper.

I reraigrus. Subacetate of copper.

Assacto. From seeds of Biza orellana.
Orange versition. Bisalphate and subsulphate
of mercury.
Chrome orange. Dechromate of lead.
Orange lead. Proto and deuto oxides of lead.
Orpiment.

Carmine purple. Carmine partially charred.
Cassius purple. Oxide of gold and tin.
Litmus. From flower of Lecomora tartarea.
Lopwood. From the tree Hamatoxylon Camp. Alkanet. Root of Anchuse tinctoria.

Alkanet. Root of Anchuse tinctoria.

Carmine. From cochinesl.

Chrome red. Dechromate of lead.

Cuchinesl. From the insect coccus cacti.

Cudhear or Archil. From the moss Rocella tinctoria.

Dranen: hinest Madder purple. From root of Rubia tinctoria. Cuoses of Arest. From the most access tinctoria. Dragon's blood. A gum resin. Indian red. Oxide of iron and earthy matter. Indense scarlet. Perodide of mercury. Lac dys. From Eccess laces lace, asc. Madder. From Foot Bubla tinetoria. Peachwood. A species of Braxilwood. Red lead. Deutonide of lead. Red celve. Peroxide of iron and earthy matter. Rospo. Esfilower and French chalk. Saflower. From flowers of the plant. Venetian red. Oxide of iron and earthy matter. Vermition. Bisulphuret of mercury. Vermition (Chinese). Ditto of arsenic. White Carbonate of lead. Constant white. Carbonate and sulphate of barytes. Constant white. Carbonate and sulphate barytes.
Flake. Sulphate of lead.
French white. Carbonate of lead.
London and Nottingham sehite. Ditto.
Peart sehite (true). Pulverized pearls.
Ditto (false). Oxide of bismuth.
Roman sehite. Carbonate of lead.
Spanish sehite. Carbonate of lime and clay.

Tin white. Oxide of tin.
White chalk. Carbonate of lime
White lead. Carbonate of lead.
Zine white. Oxide of zinc. YELLOW.

Brown ochre. Protoxide of iron and earthy Chrome pellow. Chromate of lead.

Dutch pink. Carbonate of lime and French Dutch pink. Carbonate of lime and French berries.

French berries. Unripe berries of Rhammus infectoria.

Fustic. From wood of a species of mulberry. Gambogs. A gum resin.

Indians pellow. Uriophosphate of lime.

Lemon pellow. Chromate of baryta.

Madder pellow. From root of Eubla tinctoria.

Massicot. Protoxide of lead.

Maples pellow. A compound of the oxides of lead and antimony.

Ornimant or Kind's pellow. Sulphuret of arsente. Orpiment or King's yellow. Sulphuret of arsenic. Oxford ochre. Protoxide of iron and earthy Oxford ochre. Protoxide of 1ron and earny matter.

Patent pellow. Chloride and oxide of lead. Queen's pellow or Turpeth mineral. Subsulphate of mercury.

Querctiron. From bark of Querous tinctoria. Realgar. Protoxide of iron and earthy matter.

Stone ochre. Protoxide of iron and earthy matter.

Stone ochre. Protoxide of iron and earthy matter.

Stone ochre. Protoxide of iron and earthy matter.

Stanach. From flower of Rhus coriaria. matter.
Sumach. From flower of Rhus coriaria.
Turmeric. From root of Curcussa longs.
Weld. From the plant Reseda luteda.
Yelloss ochrs. Protoxide of iron and earthy

COLUMBO-ROOT. [CALUMBO-ROOT.]
COMBS (Fr. Peignes. Ger. Kamme. It. Pelšini. Por. Peniss. Sp. Peines), instruments for cleaning and adjusting the hair, the common kinds of which are formed of horn or bone, the finer generally of tortoise-shell. Combs are mantfactured in most of our large towns.

COMMERCE is the interchange of commodities, whether manufactures or agricultural products, for money or for other commodities.

I.—HISTORICAL SUMMARY.

The origin of commerce must be ascribed to the period when man first acquired the idea of property so perfectly as to be acquainted with the most simple of all contracts, that of exchanging by barter one rude commodity for another. The wants and ingenuity of his nature would then readily suggest to him a new method of increasing his enjoyments by disposing of what was superfluous in his own stores, in order to procure what was necessary or desirable in those of other men. A commercial intercourse would thus begin and gradually spread to neighbouring tribes; but no important interchange could take place between contiguous districts whose soil and climate being nearly the same, would yield similar productions, and as remote countries could not carry on a very extensive intercourse by land, the progressive extension of commerce could take place only in those states that cultivated the art of navigation. The rude construction of vessels among the ancients, vated the art of navigation. The rude construction of vessels among the ancients, however, and their ignorance of the polarity of the magnet, rendered their maritime efforts timid, uncertain, and unimportant. The Egyptians, soon after the establishment of their monarchy (B. C. 2188), are said to have opened a trade between the Red Sea and India; but the Phoenicians were the first truly commencial people of whom we have any authentic record. The genius, policy, and laws of the Phonicians were entirely commercial, and the trade carried on by them, especially at Tracket and the trade carried on by them. cially at Tyre (Ezekiel, c. xxvii. B. C. 588) and Sidon, was more extensive than that of any other state in the ancient world. They were a nation of merchants who aimed at the empire of the sea, and actually possessed it. Their ships not only frequented all the ports of the Mediterranean, but visited the western coasts of Spain and Africa, in many of which places they founded colonies; while, through means of harbours possessed by them in the Red Sea, they established an intercourse with Arabia, India, and the eastern coast of Africa. The vast wealth thus acquired by the Phonicians incited in their neighbours the Jews, under the prosperous reigns of David and Solomon (n. c. 1014), a desire to be admitted to some share of the eastern trade; but the peculiar institutions of the Jews formed a national character incapable of that free intercourse with strangers which commerce requires. The Phonicians, however, transmitted the commercial spirit in full vigour to their own descendants the Carthaginians, who (n. c. 263) pushed their navigation and discoveries towards the west and north, far beyond the views of the parent state, but do not seem to have aspired to any share of the commerce with India. The marido not seem to have aspired to any share of the commerce with India. The maritime power of the Phoenicians was annihilated by Alexander's conquest of Tyre in the year n. c. 882; and the empire of the Carthaginians was overturned by the

Romans in the year B. C. 146.

Neither the Greeks nor the Romans imbibed the commercial enterprise which distinguished the Phonicians and Carthaginians. Several of the Greeks nor the distinguished the Phonicians and Carthaginians. Several of the Greeks artists applied themselves to commerce with considerable success; but they hardly carried on any trade beyond the limits of the Mediterranean, and their chief intercourse was with their colonies in Asia Minor, Italy, and Sicily. The genius of Alexander, however, effected a revolution in commerce hardly inferior to that in empire, occasioned by the success of his arms. His expedition to the cast, and the voyage of discovery accomplished under his auspices by Nearchus (a. c. 325) down the Indua, and along the Persian Gulf, considerably enlarged the sphere of geographical knowledge. The long and vigorous check also which he encountered from the republic of Tyre having afforded him an opportunity of observing the vast resources derived by it from trade, he was led to form the plan of rendering his dominions the centre of commerce as well as the seat of power. With this view he founded the city of Alexandria (a. c. 332) near one of the mouths of the Nile, that by its proximity to the Red Sea and the Mediterranean, it might command the trade both of the east and the west. This situation was chosen with such discarament, that Alexandria soon became the chief commercial entrepts of the world; and amidst all the successive revolutions in those countries, commerce, particularly that of the cast, continued, until the discovery of the Cape of Good Hope, to flow in the channel which the sagacity of the Macedonian had marked out for it.

The commerce of the Romans was still more inconsiderable than that of the Greeks. Their military education and the spirit of their laws concurred in estranging them from trade and navigation—pursuits which would have been deemed a degradation of a Roman citizen; and the commerce of Greece, Egypt, and other conquered countries continued to be carried on in its usual channels Neither the Greeks nor the Romans imbibed the commercial enterprise which distinguished the Phonicians and Carthaginians. Several of the Grecian states applied

monsoons was then discovered, and vessels in pursuing this trade, instead of coasting along, boldly stretched across the Arabian Sea. The Indian trade, according to Pliny, drained the empire annually of more than £400,000; and Strabo states that 120 vessels sailed yearly from the Red Sea to India, chiefly to Musiris on the

Malabar coast.

After the removal by Constantine of the seat of government to Constantinople After the removal by Constantine of the seat of government to Constantinopie (a. D. 330) the Roman empire became divided and its force weakened, and it was finally overturned (a. D. 476) by barbarous invaders from various quarters. These parcelled out Europe into many small and independent states, which, occupied by such inhabitants, may be said to have returned to a second infancy. The names of stranger and enemy became once more words of the same import, and commercial intercourse with distant nations would have nearly ceased had not Constantinopia second the destructive range of the barbarians. In that city the stantinople escaped the destructive rage of the barbarians. In that city the knowledge of ancient arts was preserved, the luxuries of foreign countries were in request, and commerce continued to flourish when it was almost extinct in every other part of Europe.

The first symptoms of revival from this torpid and inactive state were discerned

in Italy, where various causes concurred in restoring liberty and independence

to the cities. Constantinople was at first the chief mart to which the Italians resorted, but the cheaper rate at which eastern commodities were to be obtained at Alexandria (then in possession of the Soldans of Egypt) soon led to their resorting to that place, notwithstanding the violent animosities which existed between Christians and Mohammedans. The Italians, by distributing their wares over Europe, began to impart to its various nations some taste for the productions of the East, as well as some ideas of arts and manufactures. The Crusades (1999—1249), by leading multitudes from every quarter of Europe into Asia, opened a still more extensive communication between the east and the west, the means of which were chiefly supplied by Genoa, Pisa, and particularly by Venice, which, before the termination of the Holy War, became a great maritime state, possessing an extensive commerce and ample territories. A further acquaintance with the commercial resources of the East was obtained by means of the travels of Marco sessing an extensive commerce and ample territories. A further acquaintance with the commercial resources of the East was obtained by means of the travels of Marco Polo, a Venetian (1295), and others. The mariner's compass was discovered about 1302, but the art of steering by it was acquired slowly. The Portuguese and Spaniards were the first who under its guidance attempted the navigation of unknown seas. The former, step by step, explored the coast of Africa, and in 1497 discovered the passage to India by the Cape of Good Hope. About the same time (1492) America was discovered by Columbus. The influence of these discoveres upon commerce and navigation is noticed under other heads. [COLONY. EAST INDIA COMPANY.]

The extension of trade in the north of Europe led, about the year 1241, to

INDIA COMPANY.]

The extension of trade in the north of Europe led, about the year 1241, to the famous Hanseatic league [Hanse Towns], the members of which formed the first systematic plan of commerce known in the middle ages. The Hanse Towns, which attained their greatest power in the 15th and 16th centuries, traded extensively with the Lombards, exchanging naval stores and other bulky articles of the north for the productions of India and the manufactures of Italy. The city of Bruges in Flanders became the centre of communication between the Hanseatic Bruges in Fianders became the centre of communication between the fiancetic and Lombard merchants, and rose in consequence to be the principal emporium in Europe, while habits of industry spread throughout the adjacent districts. Flanders and the contiguous provinces thereby became distinguished above all other countries for manufactures, skill, and opulence. The prosperity of those districts was at its height (1567) when the religious persecutions of the Duke of Alva and others drove multitudes of its most skilful artisans to other countries. The tyrannical conduct of the Spaniards however although unious to Flanders was predictive of henefit of the Spaniards, however, although ruinous to Flanders, was productive of benefit to the neighbouring country of Holland, to which, before the expiry of the 16th century, nearly the whole commerce of Bruges, Antwerp, and other Flemish cities was transferred. Holland thenceforth rose to be the first commercial state. Her was transferred. Holland thenceforth rose to be the first commercial state. Her greatness was owing to her favourable situation, the superior industry and economy of her inhabitants, the comparatively enlightened principles of her laws, and the disturbance prevailing in other countries, all which contributed to render her the carrier of Europe. Her commerce was greatest from 1650 to 1670, during which period her external trade and navigation surpassed those of all Europe besides. Her subsequent decline is to be attributed partly to the natural progress and rivalry of other states, particularly England, but mainly to the heavy taxation with which the inhabitants were burdened, in consequence of the expenses attending the wars with Spain, France, and England, and the low rate of profit which was produced by this Spain, France, and England, and the low rate of profit which was produced by this circumstance, and the excessive accumulation of capital. Netwithstanding all the changes, however, which Holland has undergone, it continues, though not larger than Wales, and naturally not more fertile, to be the richest and most industrious than Wales, and naturally not more fertile, of all the states on the continent of Europe.

of all the states on the continent of Europe.

In England, besides the common obstructions of commerce occasioned by the nature of the fendal government, and the state of manners during the middle ages, its progress was retarded by peculiar causes. The divided state of the kingdom during the Saxon heptarehy,—the revolution of property occasioned by the Norman conquest,—the long-continued wars in support of the pretensions of her sovereigns to the throne of France,—and the destructive contests between the houses of York and Lancaster, successively checked the growth of industrious habits, and rendered the people unfit for the pursuit of any system of useful policy. The English were accordingly one of the last nations in Europe who availed themselves of those commercial advantages which were natural or peculiar to their country. Before the reign of Edward II. all their wool, except a small quantity wrought into coarse cloths for home consumption, was sold to the Flemings and Lombards, and manufactured by them; and though that monarch, in 1326, began to allure some of the Flemish weavers to settle in his kingdom, it was long before his subjects

were capable of fabricating cloth for foreign markets, and the export of wool continued to be the chief article of their commerce. All foreign commodities were brought to them by the Lombard and Hanseatic merchants. The first commercial treaty of England on record was that with Haguin king of Norway, in 1217. But the English did not venture to trade in their own ships to the Baltic until the beginning of the 14th century: it was after the middle of the 15th ere they sent

beginning of the 14th century: it was after the middle of the 15th ere they sent any ship into the Mediterranean; nor was it long before this period that they began to visit the ports of Spain or Portugal.

The accession of Henry VII. terminated the civil wars of York and Lancaster, and his vigorous and prudent administration (1485—1509) forms an important era in the history of English commerce. He maintained peace, facilitated commercial enterprise by negotiating treaties, modified the powers of corporations, and provided for uniformity in weights and measures; while, by subverting the feudal system and establishing the authority of the law, he increased the numbers of the industrious classes, elevated their condition, and rendered their property secure. Henry VIII., though he degraded the coinage, was likewise disposed to facilitate commerce; and he may be styled the founder of the Royal Navy and of the Trinity House. The Reformation, which occurred in his reign, communicated a prodigious impulse to the minds of the people, and their energies being now roused, an increased desire was felt to emulate the Spaniards and Portuguese in discovery with a view to trade. During this period the expeditions of Willoughby and Chancelor took place. Henry's successor, Mary, having espoused Philip of Spain, discountenanced all projects that might have brought England into collision with that country. But the disposition for adventure was revived during the vigorous sway countenanced all projects that might have brought England into collision with that country. But the disposition for adventure was revived during the vigorous sway of Elizabeth; and the struggle with the Spanish Armada, and the expeditions under Drake, Raleigh, Hawkins, Cavendish, and others, developed and confirmed the national taste for maritime enterprise. The East India Company was chartered by Elizabeth in the year 1600; settlements were about the same time made in the East Indies; but it was not until the reign of James I. that colonies were permanently established in North America.

The reigns of Elizabeth, James I., and Charles I. formed the era of monopolies and exclusive grants. Under Cromwell many of these were abrogated; but it was during his protectorate that the foundation was laid of our Navigation Laws, a system perfected in the next reign by the 12th Charles II. c. 18. In this reign also, government unfortunately lent itself to the urgency of our manufacturers so far as to impose heavy duties upon foreign goods, particularly in 1678 on French commodities, a course followed with increased rigour after the Revolution of 1688 and the ensuing war; national animosity concurring with the belief that

of 1688 and the ensuing war; national animosity concurring with the belief that our interests called on us to discourage the use of foreign articles. Bounties were at the same time granted on the exportation of many kinds of English goods. This was the beginning of what is designated by political economists the *Mercantile System*, a fuller explanation of which is given elsewhere. [Balance of Trade.

System, a fuller explanation of which is given elsewhere. [Balance of Trade. Bounty. Mercantile System.]

The confidence inspired by the government of the Revolution, and the now increased wealth of the country, gave life and expansion to public credit, developing almost simultaneously, however, its abuses as well as its advantages. In Funding System was introduced at that time; in 1693, the Bank of England was established, and in 1695, the Bank of Scotland; events which were shortly followed in the latter country by ill-fated colonial schemes (1695), and in the former by the South Sea Bubble (1720). But notwithstanding these reverses, and the increased burdens produced by two great wars (1701—1713 and 1739—1748), the industry and wealth of the country steadily advanced; and by 1750 the mercantile navy had increased from 270,000 tons, its amount at the beginning of the century, to upwards of 600,000 tons; Great Britain now taking the lead as the first commercial state.

The progress made by this country during the latter half of the 18th century was still more considerable, although interrupted in its first portion by the seven years' war (1756—1763), and afterwards by the insurrection of our American

was still more considerable, although interrupted in its first portion by the seven years' war (1756—1763), and afterwards by the insurrection of our American colonies, which began in 1775, and in 1778 extended to a struggle with France, Spain, and eventually Holland,—an arduous and expensive contest, from which this country was relieved by the peace of 1783, when these colonies were separated from the mother country. The people, however, soon recovered from the apprehension of loss of power caused by this separation; our town population increased, and our manufactures extended, favoured as they now were by the eary conveyance of fuel and bulky goods by canals, which about this period were generally formed throughout the kingdom. Country banking also was extended without being

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abused, while at the same time the public revenue increased slowly but progressively. The chief branch of manufacture in England had formerly been that of abused, white as says and in Scotland that of linens; but the discoveries of Hargreaves, Arkwright, Watt, and others in this period, gave an entirely new aspect to the industry of the country, particularly as regards the importance communicated to all branches of the hardware trade, and the development of the cotton manufacture, which henceforward became the great staple of both parts of the island. The impulse thus communicated led to an extraordinary increase of our shipping, which, by the end of the century, amounted to about 1,600,000 tons, having thus hear nearly tripled since 1750.

—Progress of British Commerce from 1793 to 1841.

The indications of prosperity alluded to in the latter part of the preceding section were suspended by the war of the French Revolution, which began in 1793, tion were suspended by the war of the French Revolution, which began in 1793, and was for some time productive of great commercial distress, but assumed a very different appearance after the extended circulation of bank paper in 1797, and seemed to bring a yearly addition to the national wealth. This ostensible prosperity continued during the principal part of the war. The transition to peace, however, produced a fall of prices in every department of business, and the year 1816 was among the most gloomy in our commercial history. A revival took place in 1817 and 1818, also in 1823. The year 1824 was a period of prosperity, but it was followed by excitement and overtrading, which resulted, in the end of 1825, in a commercial pressure and revulsion of almost unprecedented severity. A somewhat similar alternation of prosperity and distress again occurred in the years 1836 and 1837 respectively; and since then our commerce has been almost uniformly in a depressed state. in a depressed state.

The limits of the present article do not admit of our considering in detail the progress of trade during the extraordinary period that has elapsed since 1793 but the following table contains a digest of the principal events that occurred appended to which is an abstract of the yearly amount of our imports and exports since 1800, when the legislative union took place between Great Britain and

CHRONOLOGICAL SUMMARY OF THE PRINCIPAL EVENTS AFFROTING BRITISE COMMERCE FROM 1793 TO 1841.

Nearra Approvince Barries Commences
1841.

Steam navigation established by Fulton
in the United States, on the river Hudacon, between New York and Albany.

November 31. Bonaparte issued his Berlive Decree, whereby he declared all the
ports of Great Britain in a state of blockade, and forbade all trading with us, or in
the articles of our produce and manufactures, declaring such to be liable to seisure
and condemnation, and forbidding the
importation into the countries under his
control, which then included nearly all
continental Europe, of any goods of such
kinds as were included among the home
or colonial productions of this country,
unless they should be accompanied by
certificates, showing their origin to have
been other than British: this was the
commencement of what is sometimes
called the Continental System.

March. Blave-trade abolished by Great
Britain.

November 11. British Orders in Connection 1793. War declared by France against Great | 1806. Bter 1783. War deciared by France against Great Britain. 96. Order in Council prohibit-ing the Bank of England from paying their notes in specie,—a measure shortly afterwards ratified by the Bank Restric-tion. dct. 1800. A series of deficient harvests began in 1795, which were aggravated to dearth in this year and 1801. 1801. October 1. Suspension of hostilities with France; followed by Peace of Amiens in 1800. 1802. May 21. War again broke out between France and Great Britain.

The Warehousing System introduced (43 Geo. III. c. 132).

Geo. III. c. 132).

1805. The commerce with the United States now rises into great importance; in this and the two following years, nearly one-third of our foreign export trade being carried on with them. In this period the merchants of the United States were accustomed to sell their produce in the Continental markets to a much greater amount than their purchases in these markets; while in their dealing with this country, they had every year a large balance to pay to it. The means of liquidating this belance were furnished by the excess of their Continental sales, the amount of which was paid to the agents of the British government for bills upon the Treasury, which came as a remit or the Strikin government for bills upon the Treasury, which came as a remit-tance to our exporting merchants, and thus were funds placed at the disposal of our armies, and provided for the payment of subsidies.

March. Slave-trade abolished by Great Britain.
November 11. British Orders in Council issued, declaring, as the only condition upon which neutrals might trade with countries not at peace with Great Britain, that the vessels in which that trade was carried on should touch at some port in this country, there to pay such amount of customs duties as should be imposed by the British government; and any vessel found to have on board the certificate of origin required by the French government was declared lawful prize.
The government of the United States, finding its flag was excluded from the Continent by the Berlin Decree and the Orders in Council, interdicts altogether the trade

	of its subjects with either of the belligar- ents: first (December 27), by bleekad- ing its own ports; and next (1808, May 20), by a law forbidding intercourse with the belligarents.	INDE	Marsh 17. Treaty between Greet British and the Netherlands respecting their Rest Indian commerce and territories. The navigation laws further relaxed by the introduction by Mr. Briskings by
	ing its own ports; and next (1808, May	1	Indian commerce and territories.
	90), by a law forbidding intercourse with		The navigation laws further relaxed by
1807.	December 27. Bonaparte lessed his Miles	ŀ	The navigation laws further relaxed by the introduction, by Mr Huskisson, of The Basiprocity System (4 Ges. IV. c. 77, and 8 Geo. IV. c. 1), a measure which had become expedient in consequence of the attitude assumed by Prussia. Institution of joint-stock banks in Ireland. January 1. Mr Canning amounces the intention of the British government to prescribed treaties of compress with the
	December 37. Benaparts issued his 2files. Decree, declaring that any ship that should have paid any tax to the British government, or that had submitted to be		and 5 Geo. IV. c. 1), a measure which
	should have paid any tax to the British		had become expedient in consequence of the attitude assumed by Procede
	searched by any British authorities, was		Institution of joint-stock banks in Ireland.
	government, or that has summirzed to be searched by any British authorities, was thereby densifonalized, and became a good and lawful prize. The East India Company begin to grant licenses to the owners of Indian vessels to trade between India and China. Patragray 19. Treaty of commerce and	1895.	January 1. Mr Canning announces the
1000	The East India Company basin to grant	1	negotiate treaties of commerce with the
	licenses to the owners of Indian vessels to	ŀ	negotiate treaties of commerce with the new South American states, upon the basis of the recognition of their indepen- dence respectively: this is shortly after-
1830.	February 19. Treaty of commerce and	ļ	dense remestively: this is shortly after-
	navigation between Great Britain and	ì	AFLOR OFLIGHT IN ORDER AFRI 196 HOTEL
	Portugal.	l	of the Rio de la Plata, Colombia, Mexi-
_	The House of Commons appoint The Bul- lion Committee to inquire into the differ- ence in value of Bank of England notes		co, and the others. February 7. Treaty between Great Britain and Ressia, regulating the intercourse between their possessions on the north-
	ence in value of Bank of England notes		and Russia, regulating the intercourse
	and gold, whose report is presented to	ł	between their possessions on the north-
	Harvest greatly deficient.	—	west coast of America. September 29. Treaty of commerce and navigation between Great Britain and the Hanss Towns.
1811.	March 2. The United States pass another	į	navigation between Great Britain and
	and gold, whose report is presented to parliament in June. Harvest greatly deficient. March 2. The United States pass another non-intercourse act against Great Bri- tain; the former having been repealed by a law of Let May 1810.		Great commercial excitement throughout
	a law of 1st May 1810.		the kingdom, and numerous joint-stock
	United Kingdom: the first vessel worked	l	companies associated for banking, insur- ance, and other purposes, including about
	for hire being the Comet, of three horse		ance, and other purposes, including about seventy associations for the working of the South American mines, nearly the
1819	June 4. 17. War declared against Great		whole of which proved ruinous to the ad-
1012	Steam navigation introduced into the United Eingdom; the first vessel worked for hire being the Comet, of three herse power, which piled on the Clyde. June 4, 17. War declared against Great Britain by the Congress of the United		Venturere.
			December 12. General commercial panic
1010	The East India Company's charter re- newed for 20 years, from April 22, 1814 (53 Gee. III. c. 155), when the trade with	1	December 12. General commercial panic commenced by the failure in London of the lenting-house of Pole & Co. January 1. The Imperial System of weights
	(53 Gee. III. c. 155), when the trade with	1896.	January 1. The Imperial System of weights
	India was thrown open to the British public.		
_	October 16-19. The battle of Leipzig, an		and measure came into operation and assimilated to that of Britain. January 8. Treaty of commerce between Great Britain and France.
	October 16-19. The battle of Leipzig, an event followed by the opening of the prin- cipal ports on the continent of Europe to		January 26. Treaty of commerce between
	the trade of Great Britain. May 30. Peace between Great Britain		July 5. Repeal of system of prohibition
1814.	May 30. Peace between Great Britain	i	against the importation of foreign manu-
	and France; which, however, was inter- rupted for a short period (March—July)	i	factured silk goods, effected by the intro- duction of a modified scale of duties, to
	in the following year, by the return of	ł	be in operation after this date. Branch banks first established by the Bank
	Bonsparte. December 24. Peace of Ghent between		of England.
	Great Reitain and the United States	—	of England. Joint-stock banks allowed to be established
1815.	July 3. Treaty of commerce between		in all parts of England, except the me- tropolitan district.
1816.	July 3. Treaty of commerce between Great Britain and the United States. New silver coinage 6.66 Geo. III. c. 68), and the Mint standard of silver raised from	1827.	A new registry act for shipping, 6 Geo. IV.
	the Mint standard of silver raised from		c. 110 (now superseded by 3 & 4 Wm.
	September 26. Treaty of commerce and	1898.	A new registry act for shipping, 6 Geo. IV. c. 110 (now superseded by 3 & 4 Wm. IV. c. 55) came into operation. May 13. The United States tariff bill, im-
	navigation between Great Britain and		posing prohibitory duties on many prin- cipal articles of British manufacture,
	So. 2d. to So. 6d. per ounce. September 3d. Treaty of commerce and navigation between Great Britain and the Two Sicilies. Deficient harvest followed by large im-	l	capal articles of British manufacture, names the American senate.
	portations of foreign corn. The statute 69 Geo. III. c. 49 (Mr Peel's Act), passed, providing for the gradual resumption of specie payments by the	_	passes the American senate. Deficient harvest followed by large im-
1819.	Act), passed, providing for the gradual	1829.	portations of foreign corn. December 21. Treaty of commerce and
	resumption of specie payments by the		navigation between Great Britain and
1000	Bank of England. Pebruary 1. The Bank of England com-		Anstria.
1024-	mences to exchange its paper for bullion.	1930.	September 15. Opening of the Liverpool and Manchester rallway: the mail was
1821.	mences to exchange its paper for bullion. May 1. The Bank of England recom-		first sent by it on the 11th November
	mences payment of its notes in current,		following. October 10. Duties on ale and beer ceased
1822.	Various relaxations of our navigation laws		from this date.
	gold coin. Various relaxations of our navigation laws effected by five acts (3 Geo. 1V. c. 41, 42, 43, 44, and 46), introduced by Mr (afterwards Lord) Wallace, then President of the Board of Trade.	_	Bounties on linen and all other articles
	wards Lord) Wallace, then President of	1833.	March. Modification of the American
1000	the Board of Trade.	1	tariff; chiefly in consequence of the hos- tile attitude of South Carolina.
1027	consuls to the new states of South America.		August 29. The charter of the Bank of
1834.	October 30. The British government sends consuls to the new states of South America. April 2. Treaty of commerce between Great Britain and Prussis.		England renewed by the act 3 & 4 Wm.
	June 16. Commercial treaty between Great		IV. c. 96. Relaxation of the usury laws in favour of
	Britain and Denmark.	1	bills of exchange.

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practical operation.	1836. July 3. Treaty of commerce with Austris; and with Turkey, November 16.
- April 30. The East India Company prohib-	Deficient harvest, followed by extensive
ited from trading after this date, when	
their charter expired.	state of the exchanges, and considerable
August 1. Emandpation of the negro	
	1869. April 15. The Chinese arrest the British
nity of £20,000,000 being granted to their	superintendent at Canton, Captain Elliot,
owners by parliament.	and several merchants, who are compel-
1836. Great commercial excitement throughout this country and the United States.	led to deliver up (May 30) opium to the amount of £3,000,000.
1837. May. A total derangement of commer-	November 34. The trade between Great
cial affairs in the United States; all their	
banks suspend specie payments; and very	
extensive failures occur, the effect of	1840. January 10. The uniform Penny Postage
which is felt to a considerable extent in	
Great Britain, especially in the manufac-	half an ounce in weight, between places
turing districts.	in the United Kingdom.
November. Insurrection in Canada.	- May 15. An addition of 5 per cent. to be
1838. Colony of South Australia established.	levied, after this date, on all customs and
- April 8. The Great Western steam-ship	excise duties, except on spirits (which
sailed from Bristol to New York, where	pay an additional 4d. per gallon), corn
she arrived April 23. This voyage esta-	imported, horses let on hire, &c.
blished the practicability of the steam-	- May 21. The islands of New Zealand pro-
navigation of the Atlantic.	claimed to be British territory.
- April 16. War between France and Mexi-	June 98. Blockade of the river and har-
co, and the Mexican ports blockaded;	bour of Canton by the British.
terminated March 9, 1839, through the mediation of Great Britain.	November 16. Treaty of commerce be- tween Great Britain and Texas.
manuscher Af Attant Dillitter	1 anoth at the Twitter was Tarke

STATEMENT of the Amount of the Foreign and Colonial Trade of the United Kingdom, in each year from 1801 to 1839:—

Years. 1801 1802 1803 1804 1806 1807 1808 1809 1810	### Action of the control of the con	Exports of Foreign and Calonial Merchandise, £ 10,336,966 12,677,431 8,032,643	Experts of British and Irish Produce and Manufactures £ 24,927,684	Europe.	Other Places.	Total.
1808 1809 1810	31,786,262 29,826,210 26,622,696 27,819,552	10,336,966 12,677,431		e		
1802 1803 1804 1806 1807 1808 1809 1810	31,786,262 29,826,210 26,622,696 27,819,552	10,336,966 12,677,431			£	£
1802 1803 1804 1806 1807 1808 1809 1810	29,826,210 26,622,696 27,819,552	12,677,431			20.4	39,730,659
1803 1804 1805 1806 1807 1808 1809 1811	26,622,696 27,819,552		25,632,549		****	45,102,330
1804 1805 1806 1807 1808 1810		0,002,040	20,467,531			36,127,787
1806 1807 1808 1809 1810		8,938,741	22,687,309	****	****	37,135,746
1806 1807 1808 1809 1810	28,561,270	7,643,120	23,376,941	13,625,676	24,451,468	38,077,144
1807 1808 1809 1810	26,899,658	7,717,555	25,861,879	11,363,635	29,511,348	40,874,983
1808 1809 1810	26,734,425	7,624,312	23,391,214	9,002,237	28,243,640	37,245,877
1809 1810	26,795,540	5,776,775	24,611,215	9,016,033	28,259,069	37,275,102
1810	31,750,557	12,750,358	33,542,274	15,849,449	31,521,944	47,371,393
1811	39,301,612	9,357,435	34,061,901	15,627,806	32,810,874	48,438,680
	26,510,186	6,117,720	22,681,400	12,834,680	20,056,032	32,890,712
1812	26,163,431	9,533,065	29,508,508	****	****	41,716,964
1813		ds destroyed l	v figa.			
1814	33,755,264	19,365,981	34,207,253	26,869,591	18,624,628	45,494,219
1815	32,087,396	15,748,554	42,875,996	20,736,244	30,866,784	51,603,028
1816	27,431,604	13,480,780	35,717,070	18,653,555	23,004,318	41,657,873
1817	30,834,299	10,292,684	40,111,427	19,093,574	22,667,558	41,761,132
1818	36,885,182	10,859,817	42,700,521	19,439,382	27,163,867	46,603,249
1819	30,776,810	9,904,813	33,534,176	16,790,659	18,417,669	35,208,321
1820	32,438,650	10,555,912	38,395,625	18,429,503	17,995,149	36,424,652
1821	30,792,760	10,629,689	40,831,744	15,903,442	20,756,188	36,659,630
1822	30,500,094	9,227,589	44,236,533	16,601,562	20,367,402	36,968,964
1823	35,798,707	8,603,904	43,804,372	14,857,128	20,600,920	35,458,048
1824	37,552,935	10,204,785	48,735,551	15,698,940	24,697,360	40,396,300
1825	44,137,482	9,169,494	47,166,020	14,646,358	24,231,030	38,877,388
1826	37,686,113	10,076,286	40,965,735	13,893,270	17,643,453	31,536,723
1827	44.887.774	9,830,728	52,219,280	14,478,964	22,702,371	37,181,335
1828	45,028,805	9,946,545	52,797,455	13,775,870	23,036,886	36,812,756
1829	43,981,317	10,622,402	56,213,041	14,545,474	21,297,149	35,842,623
1830	46,245,241	8,550,437	61,140,864	15,610,638	22,660,959	38,271,597
1831	49,713,889	10,745,071	60,683,933	13,550,440	23,613,932	37,164,372
1832	44,586,741	11,044,869	65,026,702	15,584,006	20,866,588	36,450,594
1833	45,952,551	9,833,753	69,989,339	15,611,789	24,055,558	39,667,347
1834	49,362,811	11,562,036	73,831,550	18,007,033	23,642,158	41,649,191
1835	48,911,542	12,797,724	78,376,731	18,464,433	28,907,837	47,372,270
1836	57,023,867	12,391,711	85,229,837	19,011,066	34,357,505	53,368,571
1837	54,737,301	13,233,622			22,999,441	42,070,744
1838	61,268,320		72,548,047	19,071,303	28,349,675	50,060,970
1839	62,004,000	12,711,318	92,459,231 97,402,726	21,711,295 20,414,520	32,819,060	53,233,580

^{*} These apply to Great Britain only: the exports from Ireland are, however, inconsiderable.

The afficial value stated in the preceding table is rated according to a scale established so far back as 1696, when prices were altogether different from what they are at present; but the system has been preserved in the public accounts without alteration, because it is supposed to afford a correct measure of the comparative quantity of merchandise which has made up the sum of our imports and exports. On the other hand, the real or declared value is estimated at the market price, agreeably to the sums declared by the exporting merchants; this latter method, however, is only applied to the exports of the produce and manufactures of the United Kingdom.

United Kingdom.

If the progress of our foreign commerce be measured according to the official valuation, it appears that the increase since the commencement of the century has been very great; the amount of exports of British produce and manufactures within this period having indeed been nearly tripled. But if the declared value is to be assumed as the test of these last, it will be seen that little or no progress has been made,—that in fact, if one or two late years are excepted, the amount of our foreign trade has not been equal to that which was carried on during some of the years when we were at war with nearly all Europe, nor to that of the first five years of peace that followed. A still less flattering aspect is presented by that part of our commerce which, being carried on with the rich and civilized inhabitants of European nations, should present the greatest field of extension,—more especially when we look to the change which has of late taken place in the nature of our exports to those countries. This is shown in the following table prepared by Mr-Porter, of the Statistical Department of the Board of Trade (Par. Report on Import Duties, 1840, No. 601), and which exhibits facts of the utmost importance to port Duties, 1840, No. 601), and which exhibits facts of the utmost importance to the general interests of the country.

Table showing the value of British Produce and Manufactures exported to various districts or quarters of the world in 1827 and 1838, distinguishing finished manufactures and goods into the value of which much labour has entered, from materials of manufacture, and goods upon which but little labour has been bestowed; showing also the centesimal proportions of each of these two descriptions.

		1827.		1838.							
	Goods into t which ha			nel Pro-	Goods into which ha	Controling) Pro-					
	Much Labour.	Little Labour	Nw		Much Labour	Little Labour.	Number				
	l,	2.	1.	2.	1.	2.	1.	2.			
	£	£			£	£					
Russia, Sweden, Nor- way, & Denmark Prussia, Germany, Hol-	498,437	1,101,309	31-15	68-85	422,081	1,602,698	20-84	79-16			
land & Belgium Southern Europe	4,773,648	2,159,669 958,439		31-16 16-12	4,193,921 7,493,907			57-04 25-91			
Cape of Good Hope Mauritius.	196,968	19,590	90-95	9-05 11-16	576,555	46,768	99-49				
Other parts of Africa	224,378 3,812,199	34,839	86.56	13·44 14·58	689,964	67,130	91-13				
Australia	295,424			13-15				10-31			
Colonies British West Indies	1,159,340	238,010 655,994		17-04 18-31	1,745,833 2,916,129			12:38			
Foreign West Indies United States of America	860,723	46,586	94-96	5·14 4·17	1,222,326	93,205	92- 91	7419 10-60			
Brazil	2,137,111			7.57	6,782,077 2,490,806			7.13			
Other parts of S. America & Mexico.	1,648,936	43,274	97-44	2.56	2,072,821	47,480	97-75	2-25			
Guernsey, Jersey, Alder- ney, & Man	275,965	45,694	85-7 6	14-24	288,059	55,795	8377	16-23			
Total .	30,696,476	6,484,859	82-56	17:44	36,945,696	13,115,274	73:80	26-20			

Comparing 1827 with 1838, it appears, that the proportion of fully manufactured goods exported in the former year was
In the latter year, 73.80

If the shipments to British colonies and dependencies are separated from those to foreign countries, it appears that the proportionate value of the aggregate shipments in those two years was nearly the same, viz.:—

	Centesimal Proportions.	
1827, Value of Shipments to Colonies to Foreign Countries	28-27 71-73	. 100
1838, Value of Shipments to Colonies to Foreign Countries .	27·52 72·48	.100

But if those values are separated according to the degree of labour bestowed, it will be found that the proportions are,

				MOCU TWOOL	ur.	Tittle Tep	our.	
Colonies .	1827	•		84.09		15.91		100
	1838			84.55		. 15.45		100
Foreign Countries	1827			. 81.95		. 18.05		100
	1838			69 72		. 80-28	•	100
Zanarating Author th	e chin	nant	- to	Northern	Envene	it will be	£	Abak .

Separating further the shipments to Northern Europe, it will be found that the proportions are,

Much labour Little labour	•	•	61·78 38·22	•		•	39·16 60·84
			100 -				100 -

The actual amount of Shipments in 1827 and 1838 to British Colonies, to Foreign Countries generally, and to Northern Europe, was as follows:—

		1827.			1838.	
	Much La- bour.	Little La- bour.	Total.	Much La- bour.	Little La- bour-	Total.
To British Colonies	£ 8,840,268	£ 1,672,956	£ 10,513,224	£ 11,647,793	£,128,242	£ 13,776,036
To Foreign Countries gen- erally	21,856,206	4,811,903	26,668,111	25,297,903	10,987,032	36,284,935
	30,696,476	6,484,859	37,181,335	36,945,696	13,115,274	50,060,970
To Northern Europe	5,272,085	3,261,178	8,533,263	4,616,002	7,170,339	11,786,341

These results afford strong evidence of the unsatisfactory footing upon which our trading relations with the nations of Europe are established. These countries, particularly those of the North of Europe, which now take a diminished proportion of our more highly manufactured commodities, possess an abundance of productions suited to our wants, which they are naturally desirous of exchanging for the products of our looms and our mines; but by our imposing high duties upon corn and timber, the principal articles they have to give us in exchange, they have, in order to employ their own population, been driven to manufacture for themselves; "and now," as the President of the Manchester Chamber of Commerce lately remarked, "we have rivals where we should otherwise have had customers." Similar impediments exist to the extension of our intercourse with other countries, arising, however, no less from the anti-commercial system of legislation of the governments of those countries than of our own. In the report lately presented to the House of Commons by the Committee on Import Duties, the progress of manufactures throughout Europe, the growing competition with which our merchants have now to contend in foreign markets, and the consequent necessity of releasing their goods as much as possible from the unequal burden of our taxation, are very fully explained. It is shown clearly that the complicated system of our duties tends, among its other evils, to derange the natural course of trade, and to place under particular disadvantages our manufacturers who go abroad in queet of a market. An account of the remedies suggested in this report is given in the article Tarippy to which head we likewise refer for other details relating to the present condition of our foreign commerce.

III .- PRINCIPLES OF COMMERCE.

These may be partly inferred from what has been already stated. Commerce is only productive of wealth in an indirect manner. The merchant produces no alteration on the articles which he buys and sells: he merely exchanges one commodity for another; and in general, what is given is the exact equivalent of what

is received. The advantage of commerce—and it is difficult to overestimate its importance—consists in the uninterrupted scope and efficiency which it gives to the division and distribution of labour, by placing it in the power of individuals to prosecute continuously such employments as suit their taste or capacities. The intervention of the commercial class gives continuous motion to the national industry. They collect together every variety of commodities in warehouses and shops, and enable individuals, without loss of time, to supply themselves with whatever they want. Without the assistance of the merchant, it would not be possible to confine ourselves to one branch of industry, and all the advantages of co-operation and combination would be lost. Commerce, besides, is eminently conducive to the wealth and prosperity of a country, by balancing what is deficient in one district with what is superfluous in another; and by enabling it to import the commodities for the production of which the soil, climate, capital, and industry of foreign countries are best calculated, and to export in payment those articles for which its own situation is better adapted. By this distribution of the various articles suited to the accommodation of man in different and distant regions, or, as it may be described, this territorial division of labour, Providence has, by a beautiful arrangement, and one which will probably lead to the general civilisation of the world, provided for the mutual dependence of individuals and nations, and made even their selfish pursuits subservient to the general good.

In order that each community may avail itself to the uttermost of its peculiar means of production, it is essential that commercial intercourse should be free and unrestricted. Respecting the freedom of the home trade, or that between different parts or recriment of the avarcourse of the avarcourse of the home trade, or that between different is received. The advantage of commerce—and it is difficult to overestimate its

means of production, it is essential that commercial intercourse should be free and unrestricted. Respecting the freedom of the home trade, or that between different parts or provinces of the same country, no difference of opinion is now entertained. Without this freedom there would have been little or no wealth, only a limited population, and that population rude and barbarous. But although foreign trade is to all the countries in the world merely what home trade is to the different provinces of the same country, it is contended that it should be regulated in a different manner. It is alleged that the importation of foreign commodities prevents the employment of so much native industry as would be required to fabricate these goods, or some substitutes for them, at home; and that this injury is in no degree compensated by the comparative cheapness of the foreign commodities to the consumer. In this argument the attention is confined to the effect of the importation of the superior foreign article on those persons in the importing country who are already

In this argument the attention is confined to the effect of the importation of the superior foreign article on those persons in the importing country who are already engaged, or would, but for such importation, engage themselves in the manufacture of the commodity in question, or its substitute. It is altogether everlocked that the importation is only an exchange of some product of home industry for some other of foreign industry; that the equivalents of the foreign commodities must be first produced here, and then exported in exchange for them, or their introduction would be impossible; for assuredly foreigners never send us their goods except in return for an equivalent, and we can of course export nothing which is not the produce of British industry. Every obstacle, therefore, to the importation of any foreign commodity is precisely to the same extent an obstacle to the exportation of an equivalent of British produce or manufacture. And the injury sustained by the consumers of the protected articles from their higher price or inferior quality, is uncompensated by the advantage derived by any other class; the effect of all consumers or one protected articles from their higher price or inferior quality, is uncompensated by the advantage derived by any other class; the effect of all industry, by confining it to such employments as are less productive of value than those which without such interference would be undertaken. Hence, in all cases where high duties are imposed to afford protection, foreign commerce must in the nature of things be diminished to a greater extent than domestic industry is encouraged. encouraged.

The principle of free trade, however, is opposed by many in this country who do not attempt to deny the axiom, that every importation causes a correspondent exportation, on the following grounds:—

1. "The producers of such a highly taxed country as Great Britain ought to be

1. "The producers of such a highly taxed country as Great Britain ought to be protected from the competition of comparatively untaxed foreigners."

If the taxes are levied equitably, it is obvious that the producer of the commodity which would be exported in exchange for that which is imported, is as much burdened as the producer of the article which the latter would supersede. If, on the other hand, the taxes are not levied equitably, the remedy is to equalise them, not to make the imposition of one injustice the defence for another.

2. "A country loses by the importation of the goods of another, unless there is a reciprocity in the free admission of her goods, on the same terms, into the latter."

If Prussia sends goods into England, while the admission of goods from England

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into Prussia are prohibited, and the goods received by England are paid in specie, it is obvious, that in order to render it profitable for an English merchant to expert specie in exchange for Prussian goods, he or some other merchant must find it profitable to import an equal quantity of it in exchange for goods of home production, from Mexico, Peru, or some other country into which British goods find their way. If this quantity of specie could not be bought semewhere with English goods, its exportation to Prussia, would specify raise its value in this country so high, that it would no longer to profitable to expert it in explance for Prussian accompaniities. it would no longer be profitable to export it in exchange for Prussian commodities. The whole may be regarded as one transaction. The merchants of England, as a body, could not find it profitable to export specie for goods, unless it were equally profitable to purchase specie with goods. It is well known, however, that in fact very little gold or silver is employed for such purposes. [Balance of Trade. Exchange.] If England imports from Prussia more goods than it sends thither, Prussia is mostly paid by goods sent from other countries which receive from England more than they send, and their mutual balances are adjusted by the circulation of bills of exchange. Any obstacle, therefore, to the interchange of goods between one country and another, is as injurious to that imposing the restriction as to that on whose productions the restrictive duty is imposed; every tax upon importation acting to the same extent as a tax upon exportation. If France

upon importation acting to the same extent as a tax upon exportation. If France excludes our iron and yarns, she suffers from such policy quite as much as this country. In whichever of two countries the restriction is imposed, there is sure to be a reciprocity of injury; and the benefit of every relaxation, from whichever it proceeds, is sure to be enjoyed by both.

3. "It is the policy of a nation to be independent of foreign supplies, in case it may be deprived of such supplies by war."

This policy is false in principle and ruinous in practice. In the fear of war a system would be maintained, the tendency of which is to perpetuate war. More quarrels have been engendered by the commercial system of exclusion than by all the other follies and passions of subjects and rulers. The best way to preserve the nations of the earth in peace, is to let them prove how dependent each is upon the others for the profitable employment of its people, and for the comforts resulting from that profitable employment.

that profitable employment.

The system of protection was introduced into European policy in 1667 by M.Colbert, minister to Louis XIV. of France, and it has been since steadily acted upon by almost all nations, on the mistaken notion which has been generally entertained, that the protection of trade was a necessary part of the duty of the executive government; and there are few political errors which have occasioned greater mischief. The regulating mania which it inspired has termented industry in a thousand ways to force it from its natural channels. Besides falsely teaching nations to regard the welfare of their neighbours as incompatible with their own, it has foctored a spirit of conspiracy of class against class, and interest against interest,—every one trying to gain legislative favour at the expense of the rest. The prices of most articles have been artificially enhanced by protective duties or legislative monopolies. By this system of each robbing each, all parties have been losers, and the sum of national wealth has been proportionally lessened.

The policy of abandoning the restrictive system was long regarded with jealousy by the commercial classes; but juster and more liberal opinions now prevail. In the year 1820, many of the principal mercantile houses in London joined in a petition to Parliament, embodying the substance of all the principles of free trade which we have endeavoured to explain, and particularly the following:—

"That freedom from restraint is calculated to give the utmost extension to forcign trade, and the best direction to the capital and industry of the country.

"That the maxim of buying in the cheapest market, and selling in the dearest, which regulates every merchant in his individual dealings, is strictly applicable as the best rule for the trade of the whole nation.

"That of the numerous protective and prohibitory duties of our commercial code, it may be proved, that, while all operate as a heavy tax on the community at large, very few are of any ultimate benefit to the classes in whose favour they we The system of protection was introduced into European policy in 1667 by M. Colbert,

ginally instituted, and none to the extent of the loss occasioned by them to the

other classes.

"As long as the necessity for the present amount of revenue subsists, your peti-"As long as the necessity for the present amount of revenue states, you protectioners cannot expect so important a branch of it as the customs to be given up, nor to be materially diminished, unless some substitute less objectionable be suggested. But it is against every restrictive regulation of trade, not essential to the revenue; against all duties merely protective from fereign competition; and against

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the excess of such duties as are partly for the purpose of revenue, and partly for that of protection,—that the prayer of the present petition is respectfully submitted to Parliament."

The attention which this petition was the means of drawing to the anti-commercial principles of our restrictive system, powerfully tended to bring about the successive relaxations which, since its presentation to Parliament, have been made in our commercial code. Within the last few years, several circumstances have commercial code. cassive relaxations which, since its presentation to Parliament, have been made in our commercial code. Within the last few years, several circumstances have combined to draw public attention still more strongly to this subject. At a meeting of the Chamber of Commerce of Manchester, to receive the report of Dr Bowring on the Prussian Commercial League, the following resolution was passed, disclaiming protecting duties of every kind:—"This meeting regards the present as the proper occasion for reiterating its adherence to the opinion so often declared by this chamber, that the prosperity, peace, and happiness of this and other nations can be alone promoted by the adoption of those just principles of trade which shall secure to all the right of a free interchange of their respective productions; and this meeting on behalf of the great community whose interests it represents, feels especially called upon to declare its disapprobation of all those restrictive laws which, whether intended for the protection of the manufacturing or agricultural classes, must, in so far as they are operative, be injurious to the rest of the nation, unjust to the world at large, and in direct hostility to the beneficent designs of Providence." And in January 1839, deputations of merchants and manufacturers assembled in London, from Manchester, Liverpool, Leeds, Birmingham, Sheffield, Derby, Nottingham, Wolverhampton, Glasgow, Paisley, and other great towns, passed a resolution to the same effect. To these testimonies in favour of the principle of free trade has now to be added that of the Select Committee of the House of Commons on Import Duties, already alluded to, who "report their strong conviction of the necessity of an immediate change in the import duties of the kingdom," and "recommend that, as speedily as possible, the whole system of differential duties and restrictions should be reconsidered, and a change effected in such a manner that existing interests may suffer as little as possible in the transition to a more equitable s

COMMISSION OR BROKERAGE TABLE.

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COMMISSION OF BANKRUPTCY. Before the passing of the Bankruptcy Court Act, 1 & 2 Wm. IV. c. 56, bankruptcies were prosecuted under commission by the Lord Chancellor to certain commissioners. A different arrangement was adopted by that act, and the decree authorizing the prosecution of a bankruptcy is called a flat. [COMMISSIONERS.] The expression commission of bankruptcy" came into use for expressing the whole process of bankruptcy, and is still some-

times employed in that sense. BANKRUPTCY. 5

COMMISSIONERS in the Law of Bankruptcy.—In England the commissioners are officers who hold certain powers of administration and superintendence in matare officers who hold certain powers of administration and superintendence in matters of bankruptcy. Previous to the act 1 & 2 Wm. IV. c. 56, a special commission was issued under the great seal in every particular case; but the practice has been altered by that act. The commissioners in town bankruptcies are the six commissioners of the Court of Bankruptcy. [Bankruptcy, Court of.] Those in the country are permanent officers, chosen by the judges of the several circuits, from among the barristers, attorneys, and solicitors, in the respective counties of the circuits, subject to the approbation of the Chancellor. In town bankruptcies, a single commissioner acts. The commissioners of the Court of Bankruptcy take a the country commissioner acts. a single commissioner acts. The commissioners or the Court or Dankruptcy take the oath of office on their appointment; the country commissioners take a new oath on the opening of each flat. In a town bankruptcy, the flat authorizes the petitioning creditor to prosecute in the Court of Bankruptcy; in country bankruptcies, before commissioners named. It has to be observed, that in bankruptcies prosecuted in the Court of Bankruptcy, one commissioner has the same authority which was formerly conferred by a commission, and is now conferred on country commissioners by a flat. Wherever the word "commissioners" is authority which was formerly conterred by a contained, and is now conterred on country commissioners by a flat. Wherever the word "commissioners" is used in the following statements, it must be understood to refer to one commissioner in town bankruptcies, unless otherwise specified.

The commissioners receive proof of the petitioning creditor's debt, who must

The commissioners receive proof of the petitioning creditor's debt, who must attend before them in person, unless under very peculiar circumstances. They are empowered to summon before them "any person whom they shall believe capable of giving any information concerning the trading of, or any act or acts of bankruptoy" committed by, the person petitioned against, and they may command production of all documents tending to the same purpose. The remedies and means of enforcement are the same as those below stated, with regard to the other examinations (6 Geo. IV. c. 16, § 24). Being satisfied of the debt, trading, and act of bankruptcy, they adjudge the party bankrupt (§ 24), subject to review. After adjudication, the commissioners appoint the meetings for the bankrupt to surrender and conform (§ 25), and at these, and every dividend meeting, creditors may prove their debts before the commissioners. [Proof.] The commissioners are empowered, after adjudication, to summon before them persons suspected of having any part of the bankrupt estate in their possession, or of being indebted to the bankrupt, or any individuals who can give information as to his person, trade, or dealings, and they may require such individuals to produce books, papers, and vonchers. They can enforce attendance by warrants (§ 33). The examination may be on eath, and either written or verbal, and parties may be required to sign written answers. On refusal to answer lawful questions, to produce vouchers, or to sign answers to questions, the commissioners may commit the party without bail, until satisfactory answers are given, and the other directions of the act are compliced with (§ 34). The commissioners are empowered to allow charges to witnesses, who must, as in service of a subpona, have their expenses tendered (§ 35). They have similar authority to examine the hapkrupt. and the swe means of enforcing attendance. service of a subpona, have their expenses tendered (§ 35). They have similar authority to examine the bankrupt, and the same means of enforcing attendance, and "it shall be lawful for them to examine such bankrupt upon oath, either by word of mouth, or on interrogatories in writing, touching all matters relating either to his trade, dealings, or estate, or which may tend to disclose any secret grant, conveyance, or concealment of his lands, tenements, goods, money, or debts, and to reduce his answers into writing, which examination, so reduced into writing, the said bankrupt shall sign and subscribe." And the commissioners are empowered to imprison him to remain without bail "until he shall submit himself to the said to imprison him to remain without bail "until he shall submit himself to the said commissioners to be sworn, and full answers make to their satisfaction to such questions as shall be put to him, and sign and subscribe such examination" (§ 36). The commissioners may examine the bankrupt's wife, with like means of enforcement, "for the finding out and discovery of the estate, goods, and chattels of such bankrupt, concealed, kept, or disposed of by such wife, in her own person, or by her own act, or by any other person" (§ 37). Quakers may make solemn affirmation on such examinations, and falsehood, either under eath or solemn affirmation, infers the punishment of perjury (§ 99). § 39 of the act regulates the course to be adopted by the courts of law when applied to by habeas corpus or otherwise to interfere with commitments under the act. § 40 provides for the protection of the

commissioners in cases of actions of damages. No single commissioner of the Court of Bankruptey can commit an individual, except to a messenger of the court, to be brought before a subdivision court, or court of review, within three days (1 & 2 Wm. IV. c. 56, § 7). In the examinations a witness is not bound to answer a question which may criminate him, or expose him to penalties, but it will not serve as a ground of protection that the answer may expose him to a civil claim. "And a bankrupt may not only be compelled to disclose the disposition of his property, and the mode of it, although such instances may tend to prove an act of bankruptory, but he was he examined as to whether a deed was voluntary: and he cannot refuse but he may be examined as to whether a deed was voluntary; and he cannot refuse to discover the particulars relating to his estate, although such information may tend to show that he has committed a criminal act; but if the question put to him be, whether or not he has done an act clearly criminal, he may refuse to answer it " (Henley's B. L. 91). Any commissioner of the Court of Bankruptcy may adjourn an

(Henley's B. L. 91). Any commissioner of the Court of Bankruptcy may adjourn an examination, or a proof of debt, to a subdivision court, or a court of review; and if a commissioner decide any point of law or equity, or as to the refusal or admission of evidence in the case of a disputed debt, the decision is subject to review (1 & 2 Wm. IV. c. 56, §§ 30, 31). Commissioners of the Court of Bankruptcy are judges of record, and have the corresponding privileges and protections (1b. § 1). The country commissioners are protected in the execution of their duty by 6 Geo. IV. c. 16, § 41-44. (Statutes, as quoted. Henley's B. L. 79-97.)

IN IRBLAND there was, by the original bankruptcy act, 6 Wm. IV. c. 14, one commissioner, but a second was added by 7 Wm. IV. and I Vict. c. 48. In each bankruptcy, a separate commission is issued under the great seal to one of the commissioner summons the bankrupt, subjects him to examination, inquires into the trading and bankruptcy by witnesses and documents, in the same manner as the commissioners in England, and he has similar remedies for enforcing attendance. The Lord Chancellor may, on affidavit or otherwise, issue an extraordinary commission, for proof of debts, examination of witnesses, and other matters, while commission, for proof of debts, examination of witnesses, and other matters, while the person so appointed possesses the same powers to compel attendance of witnesses, and examine them, and to enforce production of documents, as the official commissioner (§ 57). [Bankruprey.]

IN SCOTLAND there are commissioners appointed in each sequestration or bank-ruptcy, whose situation and duties, however, are very different from those above described. They form a committee of three creditors, who are the assessors or council of the trustee, and whose consent is necessary to certain transactions connected with sequestrations. They are chosen at the meeting for electing the trustee, and in the same manner, by creditors duly qualified. [TRUSTER.] They must be chosen from among the creditors or mandatories, and their election is declared by the Sheriff. Where a commissioner has become disqualified, or has otherwise ceased to act, the trustee must call a meeting to elect a new one. The commissioners must concur with the trustee in submissions and other transactions. They sioners must concur with the trustee in submissions and other transactions. They meet at stated intervals to examine into the proceedings of the trustee, audit his books, and declare dividends. They fix the trustee's remuneration, and have the privilege of assembling when they think fit, to ascertain the situation of the estate. Two are a quorum. They are not entitled to purchase property sold under the bankruptcy. [Sequestration. Truster.] (2 & 3 Viot. c. 41. Buston's Manual of the Law of Scotland.)

COMPANY, an association of persons for the prosecution of a common undertaking. In carrying on those costly enterprises in which the capital of a commercial country is employed, the resources and the mind of one person are often inadequate. They require the combined capital and industry of many, with the unity of purpose and of person which belongs to an individual. Hence the origin of companies, of which the following kinds may be distinguished:—

Private Companies, or voluntary associations of two or more persons for the

or companies, or which the following kinds may be distinguished:—

Private Companies, or voluntary associations of two or more persons for the acquisition of profit, with a contribution for that end, of stipulated shares of property and industry; accompanied by an unlimited mandate to each partner to bind the company in the line of its employment, and a guarantee to third parties of all the engagements undertaken in the social name. Companies of this kind may be subdivided into Partnerships and John-Advendures, under which heads, respectively these contracts are fully described.

subdivided into Farkersenirs and South-Royaless, many tively, these contracts are fully described.

Joint-Stock Companies differ from the preceding in respect,—lst, That the credit is placed on the joint-stock of the company, as indicated by a descriptive name, instead of being personal, as indicated by a firm; 2d, That the management is delegated by the partners to a body of directors; and, 3d, That the shares are transferable.

Public or Chartered Companies are of different kinds. A royal charter enables Public or Chartered Companies are of different kinds. A royal charter enables a joint-stock company to enjoy the privileges of a corporation, and trade under a limited responsibility; the shares of such a company are transferable; the company itself undissolved by the death or bankruptcy of partners; and the management and title to pursue are vested in the officers appointed according to the charter. But to give the privilege of monopoly to a company, there must be an Act of Parliament, as in the cases of the East India Company and Bank of England.

Regulated Companies are chartered commercial associations which do not trade

upon a joint-stock, but are obliged to admit any person properly qualified, upon paying a certain fine, and agreeing to submit to the regulations of the company, each member trading upon his own stock, and at his own risk. After the revival of commerce in the 15th, 16th, and 17th centuries, it was the practice in most modern states to assign such branches of trade as were reckoned peculiarly hazardmodern states to assign such branches of trade as were reckoned peculiarly hazardous to the exclusive management of such companies, who were authorized to levy duties, and to provide for their common defence and security, as few governments had then ships and troops to spare for the defence of their subjects in remote regions. But the necessity for these associations, if it ever existed, ceased long ago; and of the regulated companies which were formerly established in Britain, as the Hamburg Company, the Russis Company, the Turkey Company, the African Company, and others (Wealth of Nations, b. 5, c. 1), a few only exist in name; all British subjects being now at liberty to trade with friendly countries, on their conforming to the regulations laid down by such countries, and to our customs laws. Patent Companies are associations instituted under the act 7 Wm. IV. & 1 Vict. 73. which provides for the limitation and regulation of the partners by letters

c. 73, which provides for the limitation and regulation of the partners by letters patent; in this way avoiding those cumbrous peculiarities of a corporation which are inconvenient to a mere trading company, and rendering the expense of an Act

of Parliament uncessary.

Societés en Commandite, though not sanctioned by the British laws, are common in France and elsewhere. They consist of a number of individuals, of whom one in France and elsewhere. They consist of a number of individuals, of whom one or more undertake the management, and are held indefinitely responsible for all engagements, as in the case of ordinary partnerships; and the others are mere shareholders, responsible only to the amount of their contributions, either paid up or contracted to be paid into the joint-stock of the association. The first, called in France commandities, may be designated managing partners; and the second, called commanditieses, non-responsible partners, or simply shareholders. Thus the commandite association is intermediate in its character between an ordinary partnership and a privileged trading company. The managing partners are liable in their whole fortunes; the others only in a limited sum.

The Constitution of Commander, in recent to the mutual rights of the partners, and their liability of the partners.

ship and a privileged trading company. The managing partners are liable in their whole fortunes; the others only in a limited sum.

The Constitution of Companies, in regard to the mutual rights of the partners, and their liabilities to the public, will be treated in detail under the heads Fartnership and Joint-Stock Concann. But an opportunity will be here taken to describe those proceedings which are usual or necessary in the institution of a company to undertake the formation of a railway, canal, or other work requiring a private Act of Parliament. In the prosecution of such undertakings, the first step usually taken is for the projectors to draw up the plan of the association, with a statement of the advantages to be derived from it, and the proposed method of carrying it into effect. This is submitted to a meeting of those interested. If the plan he approved, a subscription is opened to defray immediate expenses, and means are taken to give publicity to the plan so adopted, in order to procure shareholders. An estimate has generally been formed of the amount which is considered sufficient for the completion of the object; and the hares are agreed to be paid in such proportions and at such times as shall be afferwards fixed by the bill. In the view of introducing a private bill into Parliament, surveys are then made, and plans prepared, together with a list containing the names of every person whose interests are immediately affected, or whose estate, or any part thereof, is required for the purposes of the undertaking. Duplicates of this list, having three blank columns, besided assenting, and swatras, are forwarded to every such person, to be signed by him in whichever column he pleases, and numerous other regulations are established by the "Standing Orders" of the two Houses of Parliament, for the purpose of securing to private bills, in their progress, the observation of all whose interest they may affect; for an account of which we must refer to these orders themselves.

The preliminaries prescribed by

lapse of a certain number of days, it is moved that the bill be read a second time, when, if any objection is made, it is then gated, and the bill is either rejected or referred to a select committee, who consider it clause by clause, and are empowered to examine witnesses, and to hear counsel both in support and opposition. The committee, in almost every case, introduce a maximum of the toil, or duty, or rent (according to the nature of the measure), to be levied, and in many cases declare a maximum of interest to be divided on the capital, and order the surplus to be invested in the public flunds till the amount is sufficient to repay the advances by the shreholders,—the improvement to be then thrown open for the free enjoyment of the public. In many cases also provision is made to secure the completion of the work when once begun. The committee having completed their labours, announce their decision in a report; after which the House proceeds to the third reading of the bill, when it may be again discussed, though the report of the committee is in most cases agreed to without any farther opposition. If the bill is passed, it is carried to the House of Lords, where it goes through nearly the same forms; and if it be finally approved of by the Upper House, and receive the royal sanction, it becomes an Act of Partiament. It should also be stated, that early in the session the House fixes periods within which the different stages of private bills are required to be forwarded.

The expenses of carrying the generality of such bills through Parliament are very considerable. A much higher amount of fees is paid in the case of a private bill than in that of a public bill, to the clerks and other officers of the Knellin trailway (125 miles); payments for act of incorporation, £79,568.

North Midland rallway (72 miles), £30,568.

COMPASS (the Mariner's), an instrument employed in directing the course of

COMPASS (the Mariner's), an instrument employed in directing the course of vessels at sea. It consists of a circular card, having a magnetized needle attached to the back of it, so as to form one of its diameters; this diameter being supported to the back of it, so as to form one of its diameters; this diameter being supported on a point, and exactly balanced on its centre, turns freely round with the card, which by a particular contrivance is so suspended within a cylindrical box that it remains perfectly horizontal, notwithstanding the irregular motions to which a ship is liable at sea: it is the property of the needle, when thus balanced, to point nearly to the North Pole; whence, by simply looking at the position of the needle, the mariner can see the direction in which the vessel is sailing, and regulate his steering

accordingly.

The course indicated by the needle, however, is only the magnetic bearing, which is seldom the true direction; for the magnet rarely points exactly north, being subject to two errors from different causes, called the variation and the deviation. The former is the result of a slow progressive alteration in the position of the magnetic pole, which, within certain limits, moves from east to west, and back the progressive and the position of the little pole. again from west to east. When it was first noticed, about the middle of the 16th again from west to east. When it was first noticed, about the middle of the 16th century, the needle in London pointed some degrees to the east of the true north; this variation gradually became less, till in 1660 it coincided with the North Pole of the earth; it then gradually varied to the west, till in 1828 the variation amounted to about 25°; since which it has decreased, being at present about 24°. It also changes 10 or 15 minutes at different times of the day. The variation of the compass, however, is very different in different parts of the globe, and must therefore be determined at see by comparing the true bearing of a celestial object with its bearing by compass, which is done by a finer instrument called an asimuth compass. The cause of the variation of the compass has hitherto eluded the researches of philosophers. Captain Parry discovered that when he had passed to the north of a certain spot westward of Hudson's Strait, the needle, which had been previously varying to an extreme degree, absolutely went half round the comthe north of a certain spot westward of Hudson's Strait, the needle, which had been previously varying to an extreme degree, absolutely went half round the compass, and this continued to be the case until he had sailed considerably farther north. Whether this peculiar attraction had any reference to the real magnetic pole, further observations will perhaps determine.—The deviation of the compass is a local error, occasioned by the attraction of iron on board ship: it was first observed by Mr Wales, the astronomer of Captain Cook, and has been the cause of numerous shipwrecks: an ingenious method of discovering its amount, however, has been lately invented by Professor Barlow. The dip of the needle is a deviation from its horizontal line; it is different in different places, and, like the variation, undergoes slow changes: its diurnal change is not perceptible.

The inventor of the mariner's compass is not known. It was employed in Europe on navigation, about the middle of the 13th century, but the exact date of its introduction is matter of doubt. The Chinese, however, are said to have been acquainted

duction is matter of doubt. The Chinese, however, are said to have been acquainted with it much earlier. The attractive power of the leadstone was known to the ancient Egyptians, but was not by them applied to any practical purpose. [Con-

MERCE.]

COMPOSITION-CONTRACT, an agreement between a bankrupt trader and his creditors, by which, on its being ratified according to the terms of the statutes, the debtor is relieved from the farther operation of the bankrupt laws.

IN ENGLAND, by the bankrupt statute 6 Geo. IV. c. 16, this practice was introduced from the sequestration law of Scotland. By § 133, any meeting after the bankrupt has passed his last examination (of which and its purport 21 days' notice shall have been given in the Gazette), if he or his friends make an offer composition, or security for composition, arread to by nine-terms in number tice shall have been given in the Gazette), if he or his friends make an offer of composition, or security for composition, agreed to by nine-tenths in number and value of the creditors present, another meeting is to be appointed, and if at that meeting nine-tenths in number and value agree, the bankruptcy is to be superseded. By § 134, a creditor whose debt is less than £20, is not reckoned in number, but his debt must be computed in value. Any creditor to the amount of £50 residing out of England, must have notice of the meeting so long before as to have time to vote, and such creditor may vote by letter of attorney, as in the case of assignees. A creditor agreeing to accept any gratuity or higher composition for assenting, forfeits the debt and the gratuity; and the bankrupt may be compelled to make oath that no such transaction has taken place, and that he has used no undue means to obtain the assent of his creditors. The composition-contract having been in use in Scotland since 1793, the practice in that part of the island will in a great measure regulate that of England, except where a distinction is created by statute.

created by statute.

IN SCOTLAND, by the late sequestration act, 2 & 3 Vict. c. 41, an offer of composition may be made at the meeting appointed for electing a trustee. [TRUSTRE.] If a majority in number and nine-tenths in value, at the meeting, agree to entertain the offer, the trustee must advertise in the Edinburgh Gazette that an offer has been made and entertained, and that it will be decided upon at a meeting to be held after the bankrupt's examination, stating the day, hour, and place of the meeting. He must also send a circular by post to each creditor claiming, or mentioned in the bankrupt's extate containing a notice of the resolution and meeting. meeting. He must also send a circular by post to each cromour diaming, we meeting, with a specification of the offer and security, and an abstract of the state of the affairs and valuation of the estate, "so far as the same can be done, to enable the creditors to judge of the said offer and security" (§ 113). If at the meeting, a majority in number and nine-tenths in value accept, a bond of caution [Cautionary and his cautionary may be ledged with the trustee. majority in number and nine-tenths in value accept, a bond of caution [Cautionary Oblication] by the bankrupt and his cautioner may be lodged with the trustee. The trustee has then to send a report of the resolution of the meeting and the bond of cautionary to the Bill-Chamber Clerk of the Court of Session, or the Sheriff-Clerk of the district. The latter alternative is made, that the trustee may have the decision of the Lord Ordinary, or of the Sheriff, according to his choice. If the judge find that the requisites are complied with, he must judicially approve of the composition, after hearing all objections by opposing creditors, "and if he shall refuse to sustain the offer, or reject the vote of any creditor, he shall specify the grounds of refusal or rejection" (§ 114). The second occasion for an offer is at the meeting after the examination, or at any subsequent meeting called for the purpose grounds of refusal or rejection "(§ 114). The second occasion for an offer is at the meeting after the examination, or at any subsequent meeting called for the purpose by the trustee, with consent of the commissioners [Commissioners], when if a majority in number and four-fifths in value resolve to entertain the offer, the trustee must send notice to the creditors, as above, for a meeting within 21 days. At the meeting, a majority in number and four-fifths in value may accept the offer. The proceedings must be judicially certified as above (§ 115). If an offer having been made has been rejected, or has otherwise become ineffectual, no second offer can be entertained, unless nine-tents in number and value ascent in writing having been made has been rejected, or has otherwise become ineffectual, no second offer can be entertained, unless nine-tenths in number and value assent in writing, and the offer, stating the amount of composition and the terms of payment, be subscribed by the cautioner. Such an offer not only requires to be accepted by a majority in number and nine-tenths in value of the creditors called to a meeting by the trustee, but to be assented to by nine-tenths in value of all the creditors who have produced affidavits (§ 121). Before a composition is approved of, the commissioners have to audit the trustee's accounts, and ascertain the balance, subject to review by the Lord Ordinary or Sheriff (§ 117). The bankrupt and his cautioner in the composition are precluded from objecting to any debt given up by the bankrupt in his "state," or admitted in his offer of composition, and likewise to any security held by a creditor, unless an objection have been made in the offer of composition, written notice having been given to the creditor (§ 119). A creditor who has not produced his claim before the date of the judicial approval of the composition, has no claim against the cautioner after two years from its date (§ 120). On a composition being approved of, and the bankrupt taking the declaration or oath prescribed by the statute, he is discharged. (§ 116.)

IN IRRLAND, by 6 & 7 Wm. IV. c. 14, \$8 151 & 152, the composition-contract was established in the same terms as by \$8 133 & 134 of 6 Geo. IV. c. 16 in England, the notice of meeting being given in the Dublin Gazette.

CONESSI, the bark of the oval-leaved resolve (Wrightia antidysentericum). It

CONESSI, the bark of the oval-leaved rosebay (Wrightia antidysentericum). It is obtained chiefly at Tellicherry, on the Malabar coast, whence it is sometimes called Tellicherry bark. It has lately been introduced into the British materia medica. (Ainstin's Mat. Indica.)

CONEY, on RABBIT (Fr. Lapin. Ger. Keniglein. It. Coniglio. Sp. Conejo), a well-known redential little animal (Lepus Cunevilus, Linn.) remarkable for its fecundity,—beginning to breed at the age of six months, and producing several little animal (Lepus Cunevilus, Linn.) remarkable for its a year, generally from five to seven or eight at a time. Its fur is in considerable demand, particularly for the hat trade; at one time the silver-haired varieties, or silver sprigs, were much valued for ornamental linings to cloaks, and other pieces of dress. Coney furs are a common article of import.

CONSIGNMENT is an expression employed to designate any transaction by which an individual in one place transmits or consigns goods to an individual in another place, to be at his disposal under conditions expressed or implied. The person who transmits the goods is called the consigner,—he who receives them

in another place, to be at his disposal under conditions expressed or implied. The person who transmits the goods is called the consigner,—he who receives them the consignee. Consigner and consignee are used by merchants to express generally the shipper of merchandise, and the person to whom they are addressed, by bill of lading or otherwise. The most ordinary description of consignment is that to a factor, who has to traffic with the goods for the use of his principal, and who may deal with third parties not warned of limitations to his power, as if he were the principal. [Facron, and substance of the Factor's Act under that head.] Cargoes are sometimes consigned from debtors to creditors in satisfaction of debt, and sometimes as a fund of credit for advances, the consigner being entitled to draw on the consignee to a certain amount, or the latter advancing cash to the

draw on the censignee to a certain amount, or the latter advancing cash to the former. On failure of the consigner, the consignee has a lien on the goods in his hand for his advances. (Paley on Principal and Agent.) [FACTOR. LHEN.] CONSOLIDATED FUND. [BUDGET. REVENUE AND EXPENDITURE.] CONSOLS, a familiar term used to denote the portion of the national debt of the United Kingdom forming the 3 per cent. consolidated annuities.

CONSUL, an officer appointed by a government to reside in some foreign country for the purpose of facilitating and protecting the commerce of the subjects of such government. Consuls are not in general reckoned among diplomatic ministers; but in some particular cases (such as that of the consuls-general sent to some of the semi-barbarous states of Africa), having diplomatic duties to perform, they are accredited and treated as ministers. According to the general instructions of the British government, a consul must study "to become conversant with tions of the British government, a consul must study " to become conversant with the laws and general principles which relate to the trade of Great Britain with foreign parts; to make himself acquainted with the language, and with the municipal laws of the country wherein he resides, and especially with such laws as have any connexion with the trade between the two countries." His principal duties are any connexion with the trade between the two countries." His principal duties are "to protect and promote the lawful trade and trading interests of Great Britain by every fair and proper means;" " to caution all British subjects against carrying on an illicit commerce to the detriment of the revenue, and in violation of the laws and regulations of England, or of the country in which he resides;" " to give his best advice and assistance, whenever called upon, to his Majesty's trading subjects, quieting their differences, promoting peace, harmony, and good-will amongst them, and conciliating as much as possible the subjects of the two countries upon all points of difference which may fall under his complance." and to upheld the rightpoints of difference which may fall under his cognizance;" and to uphold the rightful interests and privileges of British subjects both in person and property, placing, however, cases where redress cannot be obtained from the local authorities in the hands of the British minister. The consul is also required to send annually to the Secretary of State for Foreign Affairs a return of the trade at the ports within his consulate; and to transmit quarterly a weekly account of the prices of agricultural consulate; and to transmit quarterly a weekly account of the prices of agricultural produce, with the course of exchange, and any remarks connected with these subjects which he may consider necessary. He is further required to acquaint his own government with the appearance of any contagious disease at the place of his residence; to afford relief to any distressed British subjects thrown upon the coast, or reaching by chance any place within his district; and to furnish intelligence, obtain supplies, and generally assist any king's ships coming within his consulate.

The consuls appointed by our government are generally British subjects; but this is not an invariable rule. Previous to the year 1814, the greater part of the English consuls abroad, who held commissions under the crown, were merchants at

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the respective places of their consular residence. Many of those consuls had no salary from government; their emoluments consisted of fees, which they levied upon the tonnage of British ships, and upon the value of their cargoes. This mode of remunerating these officers having created dissatisfaction among the commercial classes, a new system was introduced in the year 1826, and an act of Parliament was passed to abolish all consular fees on tonnage and cargoes, and to enable the crown to give remunerating salaries to consuls. According to the system founded upon the act of 1826, it was determined "that British consuls should not be in any way concerned, directly or indirectly, in commercial pursuits." This system was acted upon with some few exceptions until the year 1832, when a very considerable reduction was made in the salaries assigned to them, and "permission was given to engage in commercial pursuits," as a set-off against the reduction of salary. Thus, the principle established in 1826 was reversed, and restriction "to engage in mercantile pursuits" made the exception instead of the rule.

Table of Fees payable to Consuls-general and Consuls by the act 6 Geo. IV. c. 87.

Table (A.) Certificate of due landing of goods exported from the United Kingdom	Attending a rharge Attendam wreck, expense penses. Do. on op Managem jects dy
Table (B.) Bottomry or arbitration bond	The dol are in all lars, each sterling, a exchange ment is m

Registrations	l dollar
Visa of passport	
Valuation of goods	ner ct.
Attending sales per cent. where there	nas heen
a sharge for valuing, otherwise 1 per c	ent.
Attendance, out of consular office, at	a shin-
wreck, five dollars per diem for his	nersonel
expenses, over and above his travel	ling av
Denses.	m.9 vz-
Do. on opening a will	i dalla-
	, domers
Management of property of British sub-	
jects dying intestate	is per cu

Mars mentioned in the preceding tables cases to be paid by the delivery of dol-and no more, according to the rate of prevailing at the place where such pay-

CONTINENTAL SYSTEM. [Commerce.]
CONTO, a Portuguese word, denoting a million. A conto of reis is 1000 milreis;
commonly expressed 1000 \$000.
CONTRABAND, from the Italian Contrabando, contrary to proclamation, is
applied in one sense to the goods which are prohibited to be exported or imperted,
on the ground of theories regarding national policy, or protection te home produce. These are embodied in the customs duties act, 3 & 4 Wm. IV. c. 52, an abridgment of which will be found under the title Customs. Contraband of war is applied by belligarent powers to the furnishing of arms, provisions, or other assistance to powers with which they are at war, by neutral states, or their own subjects. Like most other questions in the law of nations, it is exceedingly difficult to decide Like most other questions in the law of nations, it is exceedingly difficult to decide what goods may or may not give assistance in the furtherance of hostilities, and consequently what are or are not contraband. "Not only arms, powder, ball, and other ammunition, but also horses and furniture, pitch, tar, sails, hemp, and cordage, masts, yards, and all other necessaries for the building or equipment of ships, are generally considered as contraband, "(Marshall on Insurance, 73). The penalties where neutrals convey contraband, are somewhat arbitrary, depending often on the power of the nation that enforces them. Formerly the vessel and cargo were forfeited, but in later times the penalty has generally been mitigated. It is treasonable in a subject of Britain to supply contraband to a nation with which this country is at war, and all contracts, including insurances, made here, in relation to the conveyance of contraband, whether by British subjects or neutrals, are void. (16.72-79.)

CONTRACT, or AGREEMENT, may be defined the legally expressed consent of two or more persons to give and receive some specified benefit.

IN ENGLAND, a person non compos cannot enter into an agreement. By the original principles of the law, infants, or minors, that is, persons under twenty-one years of age, cannot contract. In practice, however, in general, their contracts for their benefit are supported, while they are entitled to recede from those to their prejudice. A minor may bind himself for necessaries, such as food, clothing, medicine, and education; and in judging of what are necessaries, the comparative age

cine, and education; and in judging of what are necessaries, the comparative age and position of the party will be considered. Thus, where a minor was a captain in the army, he was held liable to pay for his servant's livery,—his situation being

held as requiring such an attendant (Hands v. Slaney, 8 T. R. 578). If one lends money to a minor, it would seem that the borrower will not be bound though he lay it out on necessaries, as the necessity is judged of from the nature of the contract, not from what the minor may do in consequence of it. By 9 Geo. IV. c. 14, 8, 5, a confirmation by one of full age, of a contract incurred in minority, cannot be validly made except in writing. A wife during intermarriage is incapable, without her husband's consent, of entering on an agreement, in the general case; but with respect to her separate property, she is entitled to act as if she were a single woman. (2 Vesc., senior. 190.)

(2 Vesey, senior, 190.)
All agreements to do an act on one side, should have a consideration on the other; but a deed duly executed, in the most solemn manner, under seal, is binding without a consideration; and negotiable instruments, such as bills and notes, bind without consideration, where the interest of third parties is involved. [Bill.] In the general case courts of law will not interfere either to enforce voluntary agreements, an interest, or to annul them, unless in cases of fraud. The party injured by breach of agreement, may have recourse at common law, or in equity, according to the circumstances. Where specific performance is demanded, the latter is the proper

of agreement, may have recourse at common law, or in equity, according to the circumstances. Where specific performance is demanded, the latter is the proper tribunal: Where damages for non-performance will compensate the claimant, a court of law and a jury should be resorted to. "Therefore, in general, they (Courts of Equity) will not allow a bill for a specific performance of contracts of stock, corn, hops, or other articles of merchandise, but will leave the plaintiff to his remedy at law." (Bacon's Ab.; Agreements, B. l., note.)

By the statute of Frauds, 29 Ch. II. c. 3, among many provisions which refer chiefly to agreements as to real property, it is by § 4 enacted, "That no action shall be brought whereby to charge any executor or administrator, upon any special promise, to answer damages out of his own estate, or whereby to charge the defendant, upon any special promise, to answer for the debt, default, or miscarriages of another person; or to charge any person upon any agreement made upon consideration of marriage, or upon any contract or sale of lands, tenements, or hereditaments, or any interest in or concerning them; or upon any agreement that is not to be performed within the space of one year from the making thereof; unless the agreement upon which such action shall be brought, or some memorandum or note thereof, shall be in writing, signed by the party to be charged therewith, or some other person thereunto by him lawfully authorized." By a still more important enactment (§ 17), "no contract for the sale of any goods, wares, and merchandise for the price of ten pounds sterling or upwards, shall be allowed to be good, except the buyer shall accept of part of the goods so sold, and actually receive the same, or give something in earnest to bind the bargain, or in part of payment; or that some note or memorandum in writing of the said bargain be made and signed by the parties to be charged, or their agents thereunto lawfully subtoried." By Glao IV & 14 & 8.7 this provision is declared to apply theo receive the same, or give something in earnest to bind the bargain, or in part or payment; or that some note or memorandum in writing of the said bargain be made and signed by the parties to be charged, or their agents thereunto lawfully authorized." By 9 Geo. IV. c. 14, § 7, this provision is declared to apply, though the goods may not be made, or fit for delivery at the time of the agreement. With regard to the delivery, where goods are ponderous, it may be symbolical, as by delivery of the key of the warehouse. Acceptance of samples is only held acceptance of a part, when it really is part of the bulk. The consideration need not be expressed in the memorandum. This document may consist of two separate writings. Where the seller only signed, and the name of the buyer did not appear, it was held insufficient (Champion o. Plummer, I. Bos. & Pul. 252). Where one expresses his consent by writing his name, it is of no consequence whether it be by subscription, or in the body of the memorandum. An agreement in part performed, is not affected by the statute. Such acts must be done distinctly with the view of fulfilling the agreement. (Bacon's Ab.; voce Agreements.)

IN IRELAND, the equivalent to the English statute of frauds is 7 Wm. III. c. 12, which is amended as above by 9 Geo. IV. c.14.

CONVOY, in the law of shipping, is applied to a naval force appointed by the government, for the protection of vessels plying between certain ports in time of war. An obligation to sail with convoy has occasionally been created and enforced by act of Parliament (see 38 Geo. III. c. 76, & 43 Geo. III. c. 57), while at other times it has been left to the private arrangement of the parties interested, in their careties of the protection of the parties interested, in their careties of the private arrangement of the parties interested, in their careties of the private arrangement of the parties interested, in

forced by act of Parliament (see 35 Geo. 111. c. 75, c. 45 Geo. 111. c. 5/), while at other times it has been left to the private arrangement of the parties interested, in their capacity of underwriters, &c. It was decided in 1783, that an obligation to sail with convoy is not fulfilled by incidentally accompanying and being under the protection of a ship of war, and that only vessels commissioned for that express purpose by the government constitute convoy (*Park on Insurance*, 449). The admiral commanding-in-chief on a foreign station, is, however, the representative

of the government to the effect of appointing such protection. It frequently happens that the convoy does not sail from the same port as the vessel; when this is the case, the obligation on the master is to proceed, in the usual manner, to the place of rendezvous. Convoys cannot generally be appointed for every individual voyage during its whole continuance, and in such cases vessels may have to conclude their voyages unprotected. Each voyage is, however, attached to some particular convoy, which must be kept company with so far as it goes. The master of a vessel bound to join convoy must immediately apply for sailing instructions, that he may be able to obey the signals, and may know the place of rendezvous in case of separation. Unless it be owing to impediments over which the master has no control, he is not considered as having put himself under the protection of convoy, until he has obtained sailing instructions. The principal questions as to sailing with convoy arise out of cases where it is a warranty specified or implied in insurances, and in this view it will be discussed under the head WARRANTY.

COPAIBA, on COPAIVA, commonly called a balsam, but properly an oleo-resin

in this view it will be discussed under the head WARRANTY.

COPAIBA, OR COPAIVA, commonly called a balam, but properly an oleo-resin or turpentine, is a drug obtained from the Copaifera officinalis, a native of South America, and from other species of the same tree. Two kinds are sometimes distinguished, and named from the countries in which they are produced, the Brazilian (chiefly from the province of Para), and the West Indian. The former is thin, clear, of a pale colour, pleasant aromatic smell, and of an acrid bitter taste; while the latter is thick, golden yellow, not transparent, and of less agreeable smell, even resembling turpentine. Sp. gr. 980. It is often adulterated with castor-oil and the finer sorts of turpentines. When good, it should be completely soluble in alcohol of the strength of 90 per cent.; but the simplest test of its purity is to heat a small quantity in a watch-glass, when, if good, a hard brittle resin remains. This drug is celebrated for its action as a stimulant to the mucous surfaces. About 320 cwts. are annually entered for home consumption.

are annually entered for home consumption.

COPAL, a peculiar kind of resin obtained from a large tree (Rhus copallinum), found in various tropical countries. It usually appears in the form of round, hard, shining, transparent masses, brittle, tasteless, and nearly inodorous; and is generally of a lemon hue, though the best is nearly colourless. It is fusible and inflamrally of a lemon hue, though the best is nearly colourless. It is fusible and infiammable, insoluble in water, and differs from most other resins in being very sparingly soluble in alcohol. It is, however, dissolved by ether and some essential oils, though with difficulty. The resin is chiefly employed with oil of turpentine in making copal varnish, a substance which, when carefully prepared, is durable, susceptible of a brilliant polish, and so hard as to resist scratches. It is applied to tea-boards, snuff-boxes and other utensils, and also to the preservation and restoration of paintings. Copal is principally imported from Africa, though small quantities are occasionally brought from Mexico and the East Indies.

COPPER (Fr. Cuivre. Ger. Kupfer. It. Rame. Por. Cobre. Rus. Mjed. Sp. Cobre. Sw. Koppar.), a metal of a beautiful red colour, and considerable lustre. It is very malleable and ductile, and has a peculiar smell when warmed or rubbed. It is so tenacious that a wire 1-10th of an inch in diameter will support nearly 300 lbs. Sp. gr. 8'8. Fusing point 1996° Fahr. The uses of this metal are inferior only to those of iron. It is used for coin, for covering the bottoms of ships, for boilers, and a great variety of utensils; also in the manufacture of colours, and in medicine. Its alloys are noticed under the heads of Bell-Metal., Brass, Bronze, German Silver, Speculum Metal., and Pincheck.

medicine. Its alloys are noticed under the heads of Bell-Metal, Brass, Bronze, German Silver, Sprculum Metal, and Pincherck.

Copper is found in the metallic state in nature, but not in great quantities. An amorphous mass is said to have been discovered in Brazil, weighing 2666 Portuguese pounds. The great source of its supply is an ore in which the metal is found combined with sulphur. In both states it is obtained in almost every mineral district in the world, in beds, or more commonly in veins in primitive and secondary mountains, accompanied by several other mineral substances. Mines of copper are largely worked in England, Chili, Cuba, Germany, Sweden, and Siberia; those of France, Spain, Hungary, Norway, and Ireland, are of much less conse-

The English mines were scarcely worked prior to last century; they are chiefly situated in Cornwall, where the most common ore consists of copper, iron, and sulphur, situated in Cornwall, where the most common ore consists of copper, iron, and sulphur, in nearly equal proportions, and is called yellow copper ore, or copper pyrites; veins are also worked in the counties of Devon, Anglesey (particularly in Pary's mountain near Amlwoh), and Stafford. Owing to the want of fuel in Cornwall and Devon, the ores are shipped from these countries to South Wales to be smelted, principally to works situated on the navigable rivers of Swanses and Neath; the smaller quantity of material being thus carried to the greater, while the vessels load back with coal for the use of the various steam-engines. The quantity of metallic copper yielded by the ore is commonly about 8 or 9 per cent. The produce of metal from the workings in Cornwall in 1775 was 8596 tons; in 1800, 5187 tons; in 1820, 7364 tons; and in 1838, 11,527 tons. The productive power of the mines has thus been increased more than threefold in the last 60 years. No statement can be given of the total quantity of copper raised in the United Kingdom before 1820; in that year it was 8127 tons; in 1830, 18,232 tons; and in 1840, about 16,500 tons. The annual value of this metal raised in the kingdom, estimated at from £90 to £100 per ton, may be taken at present at about £1,500,000.

The copper yielded by the British mines is more than sufficient for the consumption of the kingdom, and a considerable (but decreasing) quantity is exported; in 1820, it amounted to 121,958 cwts.; in 1830, to 183,154 cwts.; and in 1839, to 153,743 cwts. This last consisted of 16,555 cwts. unwrought in bricks and pigs; 128,977 cwts. sheets, nails, &c.; 762 cwts. coin; 39 cwts. wire; and 7410 cwts. wrought copper of other sorts. These are chiefly shipped at Liverpool and London for the East Indies, China, and the United States; considerable quantities are likewise sent to Germany, Holland, Canada, West Indies, and Brazil.

Of late years great quantities of copper ore have been brought to England, chiefly to Swansea, for the purpose of being smelted, and re-exported in the metallic state. In 1839, the amount of ore thus imported was 603,902 cwts., of which there were taken by France 84,567 cwts.; and the same year 112,839

copper smelted from foreign ore, there were exported in the same year 112,830 cwts.; of which there were taken by France 84,567 cwts.; and the rest was sent in smaller quantities to the Netherlands and the United States.

smaller quantities to the Netherlands and the United States.

British copper is exempted from the tax laid on Trw, and the oppressive regulations growing out of it. Copper sheathing and utensits, and old copper and pewter apparatus of British manufacture, returned from the British plantations; also copper stripped from vessels in ports in the United Kingdom may be admitted to entry dayly free under the following regulations:—1. Old copper-sheathing off British vessels in ports in British possessions, upon proof that it was taken off in such ports, and also that it is the property of the owner of the ship from which it was taken off in such ports, and also that it is the property of the owner of the ship from which in any port of the United Kingdom, upon the fact being certified by the landing-waiter superintending the process; the old copper to be delivered only to the copper-smith, who may re-copper the reseafform which it was stripped, he making proof to that fact.—3. Old worn-out British copper and powter utensils to be in all cases delivered when brought from B. P. in British ships, upon the consignes submitting proof that they had been used on a particular estate, and are consigned to him on account of the owner of that estate, and that he (the consignes) believes them to be of British manufacture. (Mrs. Com. Customer, Feb. 15, 1833.)

For regulations as to taking copper ore out of bond to be smelted, see Warehouses, Public Bonden.

COPPER MANUFACTURES. The custom-house accounts of exports include copper and brass manufactures together; the total quantity and declared value of these shipped in each of the years from 1828 to 1838 were as follows:—

	Cwts.	Declared Value.	Cwts.	Declared Value,
1829	161,941	£812,366	1834905,990	£961.8 33
		867,344	1835942,095	1,094,749
		803,124	1836204,835	1,072,344
		916,563	1837250,105	1,166,277
1833	198.974	884.149	1838	1.991.739

The chief shipments in 1838 were made to the following countries, namely:—
France, 85,926 cwts., £371,363; East Indies, 65,780 cwts., £303,132; United
States, 29,916 cwts., £140,722; Holland, 19,503 cwts., £86,369; Belgium, 10,496
cwts., £48,283; Germany, 7248 cwts., £36,617; Italy, 7609 cwts., £34,291; British
West Indies, 6518 cwts., £36,628; Foreign West Indies, 4845 cwts., £23,552;
British America, 5801 cwts., £29,672; Brazil, 5111 cwts., £25,595.

COPPERAS. [VITRIOL.]
COPYRIGHT. [Literary Property.]
CORAL (Fr. Corail. Ger. Korallen. It. Corale. Por. & Sp. Coral. Rus.
Korallii), a submarine production, composed of the cells of minute creatures of the
polypus kind (Polypiara cortificera, Lamarck), some species of which, after being
polished and worked, are prized as ornaments of female drees. It is a hard, compact, stony body, furrowed, and in the form of plants, with warty excrescences;
and is valued according to its size, solidity, and the depth and brilliancy of its
colour. This is most commonly yellowish white; but it also occurs red and black,
—the last being in general the most highly esteemed; there are, however, many —the last being in general the most highly esteemed; there are, however, many varieties of each kind. It is found at different depths; and it is remarked that light exerts a powerful influence on its growth as well as its colour,—the tint being darker in proportion to the deepness of the sea. Coral abounds in various parts of

the Mediterranean; the most profitable fisheries of it are those of Majorca, Minorca, Provence, and Sicily: the Sicilian one is chiefly followed by the Trapanese, who go for the purpose to Bona in Africa. In the eastern seas, it is chiefly found in the Arabian Gulf, the west coast of Sumatra, and in Japan. Some kinds of coralline bodies increase to an extraordinary size, forming immense banks or masses of submarine rocks, which are frequently dangerous to navigators.

CORD, a measure for firewood, so called because it was anciently measured by a cord. Its dimensions are stated to be eight feet in length, four feet in height, and four feet in breadth; and its weight 10 cwts. It is equal to 1000 billets.

CORDAGE. [CARLE. ROPE.]

CORDAGE. [Cable. Rope.]

CORDAGE. [Cable. Rope.]

CORDAGE. [Cable. Rope.]

CORDUROY, a fabric of cloth originally composed of silk, but now very extensively made in England of cotton. The common kind is of a plain body, a better is twilled in the back, and the best is twilled on both sides; but there is of each kind a variety of qualities. The usual colours are clive, drab, slate, fawn, and white. The material is no doubt important, but duetility, pile of a moderate height, and a clear colour, are also characteristics of good corduroy. It is in pieces varying in length from 40 to 70 yards.

CORIANDER-SEED is the fruit of an annual umbelliferous plant (Coriandrum catimum). found wild about Ipswich and in some parts of Essex. When fresh, their

satioum), found wild about Ipswich and in some parts of Essex. When fresh, their smell is strong and disagreeable, but by drying becomes sufficiently grateful. They are used in sweetmeats, in brewing, distilling, and in certain stomachic liqueurs;

are used in sweetmeats, in brewing, distilling, and in correan secondary, and in some countries in cookery.

CORK (Fr. Liége. Ger. Kork. It. Sughero, Suvero. Por. Cortica de Saweiro. Sp. Corcho), the outer bark of a species of evergreen oak (Quercus suber), abundant in Portugal, Spain, especially Catalonia and Valencia, Italy, the south of France, Corsica, and other countries. This substance is in reality dead bark, and its removal is effected without injury. The tree is first barked in the fifteenth year of its growth, and this operation is repeated every eight or ten years afterwards. Cork is light, porous, compressible, and elastic. It should be chosen in fine layers or boards, not broken nor knotty, smooth when cut, and of moderate thickness. It is employed for stopping bottles and casks; as floats for nets; and for other purposes. The best white cork is grown in France, but this country is supplied almost exclusively from Portugal,—whence it is imported generally as dunnage in

purposes. The best white cork is grown in France, but this country is supplied almost exclusively from Portugal,—whence it is imported generally as dunnage in ships laden with wine. The annual consumption is now about 60,000 cwts.

CORN (Dan. Korn. Du. Graenen, Koren. Fr. Blede, Grains. Ger. Korn, Getreide. It. Biade, Grani. Lat. Frumentum. Pol. Zbose. Por. Graes. Ran. Chlieb. Sp. Granos. Sw. Säd, Spannad), means strictly "grain in the ear," or "grain unthrashed;" but in commerce the term is applied in a more comprehensive sense to all kinds of grain or pulse fit for food, in whatever state of preparation.

preparation.

I. HISTORICAL SUMMARY OF THE ENGLISH CORN-LAWS.

1. HISTORICAL SUMMARY OF THE ENGLISH CORN-LAWS.

Period prior to 1638.—The general tendency of early legislation was to restrict the exportation of corn, in order to ensure a sufficient supply of food for the people, while its importation was freely permitted. The first statute on record upon this subject is the 34th Edw. III. c. 20, passed in 1860-61, which prohibited exportation. In the succeeding reign, in 1394 (17 Rich. II. c. 7), a counter-law was enacted, allowing exportation on payment of "the subsidies and devoirs thereof due," except when prohibited by the king in council; a permission which was placed under more definite limitations in 1436 by the act 15 Hen. VI. c. 2, which declared the export of corn legal only when its price did not exceed 6s. 8d. per quarter for wheat, and 3s. per quarter for barley. This act was continued in 1441, and in 1444-45 it was rendered perpetual.

The first symptom

The first symptom of a protective corn-law was in 1463, when the importation of corn of foreign growth was prohibited unless the price of wheat should exceed 6s. 8d. the quarter, that of rye 4s., and that of barley 3s. From this we may conclude that the balance of prices had turned, and that, at least for a time, they were

higher in England than in the neighbouring countries.

These laws, regulating the exportation and importation of corn, continued in force until 1534, when exportation was prohibited, except "by license under the king's great seal;" but it having been found impossible to enforce this law, it was thought that better success would attend the regulation than the prohibition of the trade, and accordingly the permission to export grain was restored in 1554, whenever the prices were at or under 6s. 8d. per quarter for wheat, 4s. for rye, and 3s. for barley. In 1562, these limits were enlarged; the wheat to 10s., the rye to 8s., and the barley to 6s. 8d.; and in 1571, it was enacted by the 13th Elix. c. 13, that corn might be exported at certain specified duties at all times when no proclamation had been issued to the contrary. This act gave virtual freedom to the trade, as though the law of 1463 continued in existence, prohibiting importation while the price of wheat, rye, and barley should be under 6s. 8d., 4s., and 8s., respectively, the rates that had for some time prevailed rendered this law inoperative.

This system was continued in the succeeding reigns, but accompanied with various modifications, particularly as regards the prices at which export was permitted, which were from time to time enlarged, until in 1670 the shipment of wheat was allowed at any time when the price did not exceed 53s. 4d. per quarter. In order to keep the price at this high rate, heavy or rather prohibitory duties were at the same time imposed upon importation.

Besides thus trammeling the foreign trade in corn, our ancestors thought proper

Besides thus trammeling the foreign trade in corn, our ancestors thought proper to impose restrictions upon the trade within the kingdom, under the impression that if the consumers could be brought to purchase immediately from the growers, the profits of intermediate corn-dealers would be saved,—and that the injurious effects of dearths, which then frequently occurred, were attributable to the practices of those dealers in buying up corn, and withdrawing it from market. In 1551, an act was passed declaring the buying of corn in one market with intent to sell it in another to be engressing, an offence punishable with fine and imprisonment; and by a statute of Queen Elizabeth, no person was permitted to convey corn from one part of the kingdom to another without a license from the magistrates in quarter sessions. In 1624, these restrictions were considerably modified; and in 1675, the engrossing of corn was made legal whenever the price of wheat did not exceed 48s.

exceed 48s.* Period of the Bounty System from 1688 to 1815.—The era of 1688 is as important in the history of our corn-laws as of our constitution. Not satisfied with the degree of favour obtained by the law of 1670, the landowners succeeded, in 1689, in procuring an act (1 Wm. & Mary, c. 12), which provided that whenever wheat in the home market should be at or below 48s., and barley at or below 24s., there should be allowed a bounty on export of 5s. a-quarter for wheat, and 2s. 6d. for barley. By a subsequent act, in 1700, every thing in the shape of duty on English corn was relinquished by the crown; and in 1707, on the legislative union with Scotland, the operation of the corn-laws was rendered uniform throughout Great Britain.

The grand argument brought forward in favour of the bounty law was its tend-

the operation of the corn-laws was rendered uniform throughout Great Britain.

The grand argument brought forward in favour of the bounty law was its tendency to prevent a scarcity by inducing the farmers to raise a surplus stock of corn. If, however, as commonly alleged, the real view regarded an object more directly resulting from it, namely, the raising of the rent of land, the projectors of the law were disappointed. The result of the system was, as may naturally be conceived, a large exportation in abundant years; but it had not, on taking a comprehensive view of its operation, the effect of creating a general or permanent rise of prices. On comparing the 70 years which followed the enactment of the bounty with the 70 that preceded it, we shall find (Wealth of Nations, b. i. 11), that the price of wheat was considerably lower in the latter period; and there seems to be little doubt that by carrying cultivation at first too far, it had counteracted the intention for which it was framed. No progressive or constant rise was com-

^{*} So lately as 1800, engrossing has been held to be an offence at common law, and a corn-dealer was convicted of it, though he was not brought up for judgment. "Those who still imagine," says Mr Buchanan, "that corn is artificially raised in price, would do well to consider that as the supply of provisions is liable to great variations, there must be some provision in the economy of nature for making a smaller supply last as long as a larger supply; that there is no way of thus regulating the consumption but by the price, and that it is, accordingly, in reference to this great object that the price is invariably fixed. It neither can be lowered nor increased but for the sake of more exactly suiting the daily and weekly waste to the supply of the year. If we suppose, for example, that the supply falls in one year one-twelfth below the level of an average crop (which we know frequently happens), it would, if consumption were to go on at the ordinary rate, be consumed in the course of eleven months, leaving the last month wholly unprovided for. But this we know never happens, and it is only prevented by a rise of price, which measures the consumption by the deficiency of the crop; and whether, therefore, there is an shundant, middling, or acarce crop, a suitable allowance is sure to be measured out to the consumer, by a low, a middling, or a high price. The corn-dealer, indeed, thinks nothing about all this; his object is to sell his commodity at the highest price; and in a scarcity he takes his fall advantage; but while he is thinking only of himself,—while he is only playing his own paltry game, he is a mere instrument in the hands of Him who brings good out of evil, and who turns the little passions of man to the purposes of his own benevolence and wisdom. There is really nothing in nature more wonderful than that great law of society by which substates is measured out in due proportion to the supply of the year; and the more deeply it is considered, the more worthy will it appear of profound and rational admir

municated to prices until after 1760, by which time the increase of our population began to be such as nearly to equal by their consumption the enlarged produce of the agriculturists. The rapid rise of price arising from this cause about ten years afterwards, induced government to resort at first to temporary prohibitions of export; but in 1773, the decisive step was taken of abrogating the bounty until our markets should fall below the price at which it was formerly allowed, namely, until wheat should be 44s. a-quarter, and barley 22s.; a measure which amounted virtually to its withdrawal. A more direct influence on the market, however, was affected by the abolition at the same time of the restraints on importation. was effected by the abolition at the same time of the restraints on importation, which was now permitted at the nominal duty of 6d., so long as the home market should be at or above 48s. for wheat, and 24s. for barley. The object of these regulations was to maintain, as far as possible, a level rate of 48s., which the act assumed to be a fair price both for grower and consumer. This revolution in the law, though ascribed to the influence of Dr Smith and Mr Burke, arose more immediately from a consideration of the popular discontent attendant on the rapid advance of prices.

advance of prices.

The landowners were loud in declaiming against this change,—ascribing to it that cessation in our exports which may be more justly attributed to the increased consumption attendant on an augmented population; and on the plea that the country might become dependent upon foreign states for food, this powerful class succeeded, in 1791, in procuring an act raising the price at which importation was allowed at 6d. per quarter, to 54s.; a duty of 2s. 6d. was imposed when the price was between 50s. and 54s.; and 24s. 3d. per quarter was charged when the price was below 50s. Under this act the maritime counties of England were divided into twelve districts, and importation and exportation in each were regulated by their respective prices.

In 1804, the prices at which the prohibitory duty of 24s. 3d. was charged, was raised from 5ss. to 63s.; between this last price and 66s., the duty was 2s. 6d.; and above 66s., it was 6d. per quarter. By this act, the mode of fixing the prices adopted in 1791 was altered, and the aggregate average of the twelve districts was

above oos., it was od. per quarter. By this act, the mode of fixing the prices adopted in 1791 was altered, and the aggregate average of the twelve districts was taken as the measure for regulating importation and exportation.

In 1814 (54 Geo. III. c. 69), the bounty system was abolished; but it may be observed, that none could have been claimed at any time after 1792, in which particular year the average price was below that fixed in 1773.

Period from 1815 to 1828.—In 1815, a law (55 Geo. III. c. 26) was passed, after much opposition, and exciting great clamour, permitting the free importation of foreign corn to be warehoused, or re-exported, but forbidding the importation for consumption, unless the average prices were, for wheat, 80s.; for rye, pease, and beans, 53s.; for barley, 40s.; and for oats, 26s. Every kind might be brought from the colonies when the prices were, for wheat, 67s.; rye, pease, and beans, 44s.; barley, 33s.; and oats, 22s. Owing to deficient harvests in 1816 and 1817, prices were raised above these limits, and so much corn was imported free of duty, that a considerable surplus was left for future years. The harvest of 1822 was one of abundance, and during the next twelve months prices fell below what they had been since 1792. The projectors of the act of 1815 expected that its effect would have been to keep up wheat to about 80s. per quarter, but so far was this expectation from being realized, that, excepting in the years of scarcity already alluded to, the average price, up to 1828, when the system of prohibition was exchanged for that of a graduated duty, was only 58s. 5d.

Meantime, however, the law of 1815 was modified in 1823, so as to allow of importation whenever the price of wheat was 70s., for rye, pease, and beans, 46s.,

portation whenever the price of wheat was 70s., for ryo, pesse, and beans, 46s., for barley, 35s., and for oats, 25s. per quarter, when a duty of 17s. was to be payable on wheat during the first three months of importation, and 12s. thereafter (and proportional rates for other grain); but prices were never such, during the continuance of this act, as to bring it into operation. In 1825, the importation of tinuance of this act, as to bring it into operation. In 1820, the importation of colonial wheat was permitted, upon payment of a duty of 5s. per quarter, without reference to the price in the British market. In the same year, another act was passed, permitting, until the 15th August, the entry of corn warehoused prior to May 1822 at a low duty; and in the following year, the apprehensions of a deficient harvest forced the government to the extraordinary step of having recourse to an order of council to admit 500,000 quarters of foreign wheat at an almost nominal rate of duty in order on the one hand to allowing the averaging of the prohibitory. rate of duty, in order, on the one hand, to alleviate the severity of the prohibitory system, and on the other, to prevent the opening of the ports, and the consequent probable admission of such a quantity of grain beyond the actual wants of the country as might have affected prices for a long period afterwards.

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These indications of imperfection in the system, which admitted of alternate prohibition and unlimited importation, gave strength to the opinion that a better plan might be devised; and its inconvenience having at length been recognised by all parties, the act of 1828 founded upon a series of resolutions introduced by Mr Charles Grant (now Lord Glenelg), was passed, by which the trade has been since regulated.

II. Existing Regulations of the British Coen-trade.

These are embedied in the act 9 Geo. IV. c. 60 (15th July 1828), the principle of which is the constant freedom of importation, upon the payment of duties fluctuating according to the average price of grain, decreasing as the price advances, and increasing as the price falls.

COR

of which is the constant freedom of importation, upon the payment of duties fluctuating according to the average price of grain, decreasing as the price advances, and increasing as the price falls.

§1. 2. Repeal former acts.

§3. There shall be levied upon all corn entered for home consumption in the United Kingdom, from parts beyond seas, the duties specified in the subjoined table.

Some of the produce of such possession, until the owner or shipper shall have subscribed, before the chief officer of customs at the port of hipment, a declaration specifying the quentity of each sort, and that the same was the produce of such possession, not such as the produce of such possession, the control of the produce of such possession, the price of the quantity of each sort, and that the same was the produce of such sort, and that the same was the produce of such sort, and that the same was the produce of such sort, and that the same was the produce of such sort, and that the same was the produce of the quantity of cent of Europe, the master of the ship important the same was the produce of any B.

P. out of Europe, the master of the ship important before whom the same was made, together to the chief difficer of customs at the port of shipment before whom the same was made, together to the chief difficer of customs of the quantity of cent on short was considered to be shipped; and such master shall also asheriche, before the chief officer of customs at the port of shipment before whom the same was made, together with the certificate signed by the said chief officer of customs of the quantity of cent on shearing the short which the same was the produced by the said chief officer of customs of the quantity of cent on shearing the short with the certificate signed by the said chief officer of customs of the quantity of cent of the produced by this, without the same was active to the condition of corns of the quantity of cent of the condition of the quantity of cent of the produced of the condition of the produced of the con

Inspectors to make Weekly Returns to Comptroller, § 29.

Weekly Averages, § 30. The average prices of all British corn, by which the said duties shall be regulated, shall be made ap and computed on Thursday in each week, in manner following:—
The comptroller shall, each Thursday, from the returns received by him during the preceding week, ending on and including the Saturday in such week, add the total quantities of each sort of British corn sold, and the total prices for which the same shall have been sold, and shall divide the latter by the former; and the sum produced thereby shall be added to the sums in like manner, produced in the five weeks immediately proceeding the same, and the amount thereof being divided by six, will give the sum which shall be taken to be the aggregate average price of each sort of British corn respectively; and the comparison of the U. K.; and the duties to be paid shall from time to time be regulated at each of the ports, by the average aggregate prices of British corn at the time of the entry for home consumptions at the time of the entry for home consumptions.

tion, of any corn, grain, meal, or flour, chargeer, § 29.

tion, of any corn, grain, meal, or flour, chargeer, § 29.

tion, of any corn, grain, meal, or flour, chargeable with any such duty, as such aggregate average prices shall appear, and be stated in the last
squiated, shall be made up and computed on
raday in each week, in manner following:

Imperial Measure (§ 31) to be used in commorphism constitutes.

DUTIES ON FOREIGN CORN ENTERED FOR HOME CONSUMPTION.

IF IMPORTED	PROM A	NY FORRIGH COUNTRY.		
Average Price of British Corn.	Duty per qr.	Average Price of British Corn.	Du	
Wheat.—61s. and under 62s. per qr For each 1s. under 61s., 1s. additional 62s. and under 63s. 63s. 64s. 64s. 65s. 65s. 66s.		Octs.—24s. and under 25s. per qr	10	d. 9
67s 68s	18 8	At or above 31s	1	0
68s. 69s	13 8 10 8	Rye, Pease, and Beans.—35s. and under 36s. per qr. And for each 1s. under 35s. such duty to be increased by 1s. 6d.	16	9
72s. 73s. And at or above 73s. Burley, Maise, Buck Wheat, Bear or Biog.—33s. and under 33s. per gr.	2 8	36s. and under 37s. And for every additional Is. from 36s. to 46s. such duty to be decreased by is. 6d.	15	6
And for each is, under 33s, such duty to be increased by is. 6d. 33s, and under 34s. And for every additional is, from 33s, to 41s, such duty to be decreased by is. 6d. When at or above 41s.	12 4	At or above 46s	1	0
Wheat.—Until British wheat be 67s When at or above 67s. per qr Bariey, Maise, Buck Whaat, Bear or Bigg.—Until British bariey be 34s When at or above 34s. per qr When at or above 25s. per qr When at or above 25s. per qr	5 0 • 6 2 6 9 0	NY BRITTER POSSESSION OUT OF BURDPE. Rec. Peter, and Bann.—Until British rye, pease, or beans be 41s. When at or above 41s. per qr Wheatmeal and Flour, per barrel of 196 lbs.—Duty qual to that on 383 gallons of wheat. Calmeal, per quantity of 1813 lbs.—Duty equal to that on 1 quarter of oats.	3 0	0

III. STATISTICS OF THE CORN-TRADE.

In presenting a brief summary of the progress of this branch of industry in the In presenting a brief summary of the progress of this branch of industry in the United Kingdom, we doem it unnecessary to go farther back than the year 1760, partly from the imperfect nature of the statistical materials previously in existence, but chiefly from the circumstance that it is from that period we may date the great development of manufactures, and commerce, and increase of town population, which caused Great Britain to become an importing instead of an exporting country for corn. Taking decennial periods, we find that, in the first ten years, 1760-1769,

when the average population of England (including Wales) was 6,850,000, the quantity of wheat produced exceeded the consumption by 1,384,561 quarters,—a quantity so nearly equal to the wants of the people, that the deficient harvests of 1767 and 1768 occasioned the importation of 834,659 quarters. The average price during this period is estimated by Mr Porter at 87s. per quarter,—a price which appears to have given a stimulus to agriculture, as the number of inclosure bills passed was 385. In the second period, 1770-1779, when the mean population had advanced to 7,520,000, we find five years of export and five of import,—the imports rather preponderating in quantity. In this period the average price of wheat, according to the London Gazette, was 45s. per quarter, and the number of inclosure bills was increased to 660. In the next period, 1780-1789, six were years of export, and four were years of import; but the excess of the imports of wheat was only 233,502 quarters,—the supply being thus nearly on a level with the consumption of the people, the mean number of which now reached 8,170,000. In this period, the average price was 45s. 9d., having once been as high as 52s. 8d.; the number of inclosure bills, however, fell off to 246.

In the ten years from 1790 to 1799, England ceased to be an exporting country; the last shipments of wheat having been, as already noticed, in 1792, when the price fell to 41s. 9d. War immediately followed; and a series of deficient harvests began in 1795, which forced up prices, and led to the passing of an increased number of inclosure bills. The deficiency extended to a positive dearth in the first two years of the next decennary period, 1800-1809; and the price of wheat having been raised to the unprecedented height of 115s. 11d, per quarter, a great additional quantity of land was brought under the plough.

In 1809, another deficient harvest occurred, and, notwithstanding the importation of 1,500,000 quarters of wheat, the average price of list is a most of late to the passing o the same portion of ground, than was obtained in general as and community,—an improvement which has been effected by the more complete drainage of the land, the adoption of better rotations, the enforcement of greater economy in the management of details, and other causes. This improvement is not universally admitted by the landowners, many of whom contend that, owing to the fall of prices, agriculture has materially declined since 1815, and in particular since 1820; but though this fall has certainly involved many in difficulties, there is still incontestable evidence to show that the agriculture of the kingdom generally, so far from declining, has made an astonishing progress since 1815. In illustration of this position, Mr Porter, in his valuable "Progress of the Nation" (sec. 2, c. 1, p. 171), exhibits the proportionally decreasing quantities of land brought into use from 1801 to 1835 in contrast with the increase of the population during the same period in the United Kingdom as follows:—

Inclosure	Increase of		Increase of
Bills. Acres.	Population.	Bills. Acres.	Population.
1901 to 18109061,657,990	2,209,618	1891 to 1830186340,390	3,113,961
1811 to 18207711.410.930	2.645.738	1831 to 1835 56 109.480	1.458.403

In the period from 1820 to 1835 there was no increase worth mentioning in the quantity of foreign corn entered for home consumption as compared with the previous ten years, while there can be no doubt that the bulk of the population now consume more corn, and particularly wheat, than at any former period. We are therefore brought irresistibly to the conclusion that a very great increase of produce must have taken place. According to the estimates adopted by Mr Porter, "10,000 acres of arable and pasture land, which, as cultivated in 1801, supported 4527 inhabitants, do, at the present day, owing to the improvements brought about in the art of agriculture, support 5555 inhabitants;" being an increase of about 4th or 25 per cent. in this period. Again, if we compare the present state of the agricultural class with their condition before the last war, a still more advantageous contrast is exhibited. "With scarcely any exception," says he, "the revenue drawn, in the form of rent, from the ownership of the soil, has been at least doubled in every part of Great Britain since 1790. This is not a random assertion, but, as regards many counties of England, can be proved by the testimony of living witregards many counties of England, can be proved by the testimony of living wit-nesses, while in Scotland the fact is notorious to the whole population."

No means have been hitherto devised for ascertaining the actual produce of corn

No means have been hitherto devised for ascertaining the actual produce of corn in this country. But looking to the statements of the best authorities, and allowing for the circumstance that nearly one-half of the population of Ireland live chiefly upon potatoes, the average annual produce of grain of all kinds, in the United Kingdom, may be estimated at about 56,000,000 quarters. Deducting one-seventh for seed, there remains 48,000,000 quarters for consumption as food, and otherwise. Adding to this the annual importation from abroad, which on an average of the 12 years from 1829 to 1840, inclusive, was 1,685,607 quarters, makes the total yearly consumption about fifty millions of quarters, or nearly one million of quarters a-week; of this upwards of one-fourth may be estimated to consist of wheat.

The extent to which the potato is used as food in Ireland allows a considerable quantity of grain, the produce of that part of the kingdom, to be sent to Great Britain. The quantity thus exported has (as shown in Table, No. I.) increased from between 300,000 and 400,000 quarters yearly, to about 3,000,000 quarters since the commencement of the present century. It chiefly consists of oats; this grain forming about five-sevenths of the whole, while the wheat is only about one-sixth. The shipments take place chiefly at the ports of Waterford, Limerick, Cork, Dublin, and Drogheda; large quantities are also sent from Wexford, Galway, Newry, Dundalk, Sligo, Londonderry, and Newport. The principal ports at which those shipments are received in Great Britain are Liverpool (about 450,000 quarters grain), and Glasgow (nearly 400,000 quarters grain, and 300,000 cwts. meal and flour); but a considerable share of this trade is likewise possessed by Bristol, Pottsmouth, Gloucester, Southampton, Cardiff, Swansea, and Lancaster. (Par. Paper, 1839, No. 27.)

The chief seat of the British trade is London, where a great weekly market is held every Monday at the Corn Exchange, Mark Lane; Wednesdays and Fridays being also business days.

The total quantity of British wheat sold in the 150 towns from which returns are made to the Corn-office was, in the year 1829, 2,576,129 quarters; in 1834, 3,768,602 quarters; and in 1838, 4,064,305 quarters.

From the annexed accounts it will be seen that the foreign supplies are principally

received from the north of Europe, especially Prussia, or rather Prussian Poland, the produce of which is brought down the Vistula on rafts to Dantzic, the chief the produce of which is brought down the Vistula on rafts to Dantzic, the chief port of shipment. The price of the wheat exported from this port averages rather higher than at other places, but this difference is more than counterbalanced by the superiority of its quality, which is nearly equal to the English, the "best white" or "high mixed" being indeed superior to our best. Hamburg is likewise an important grain market, being an emporium for the produce of the extensive countries watered by the Elbe, as well as for large quantities of Baltic corn. The chief other exporting ports in the north of Europe are Konigsberg, Riga, Petersburg, Rostock, and Rotterdam. In the south of Europe, the only great shipping port is Odessa; but it is unlikely that any considerable quantity will be ever imported from thence to Great Britain, as, owing to the distance between the two places, it is essential, to preserve the wheat in condition and from heating, that the voyage should be undertaken in winter. A fuller account of the corn-trade at these places will be found under the heads Pressia, Hamburg, Russia, Mecklenburg, and Holland. HOLLAND.

The quantity of foreign corn entered for home consumption varies of course according to the productiveness of our harvest. In 1833, it was only 110,307 quarters; while, in 1839, it amounted to no less than 4,632,361 quarters, being the largest supply ever introduced into this country in any one year. The latter quantity must have constituted a very considerable proportion of the grain brought to our markets in 1839, as, besides the great deficiency in the harvest of the previous year, it must be borne in mind that a portion of the produce of this country, which has been variously estimated at from a half to two-thirds of the whole, is never brought for sale, but is consumed in the agricultural districts, and employed as seed. Its influence in checking prices must also have been considerable; for, as we have elsewhere shown [Price], the natural effect of a deficiency in the supply of so necessary an article as corn, is to produce a more than equivalent rise in its price.

An account of the varieties and qualities of the different kinds of grain will be found under the heads Wheat, Oats, Barley, &c.

No. I. STATEMENT of the Quantities of Irish Grain (principally Oats) imported into Great Britain in each Year from 5th January 1800 to 5th January 1840.

Yrs.	Quarters-	Yrs.	Quarters.	Yrs.	Quarters.	Yre.	Quarters.	Yra.	Quarters.	Yrs.	Quarters
1800 1801 1803 1803	595 461,371 843,547	1808 1809 1810	939,478 631,227	1814 1815 1816 1817	821,192 873,865 695,651	1833 1833 1894	1,822,816 1,063,069 1,898,163 1,634,000	7621 1620 1639	2,307,944 2,915,591 2,429,189	1836 1837 1838	2,958,279 3,039,293 3,474,302
1804 1805 1806	316,968 306,994	1812	597,356	1818 1819 1890	1,904,733	1895 1896	2,913,962 1,693,392	1839 1833	2,090,767 2,737,441	1830 1840	2,943,149

The quantities of the different kinds imported from Ireland in 1839 were as follows:—Oats, 2,381,348 quarters, and oatmeal, 917,051 cwt. (equivalent, at 176 lbs. per quarter, to 583,584 quarters grain); what, 59,473 quarters, and flour, 559,504 cwt. (equivalent, at 392 lbs. per quarter, 189,586 quarters grain); barley, including bear or bigg, 51,673 quarters; press, 1484 quarters; beans, 11,536 quarters; matt, 2981 quarters; in all, 2,543,149 quarters as above. **

No. II. Account of the Quantities of Foreign and Colonial Wheat imported; the average price of British Wheat, according to the London Gazette; and the nature of the Crope from 1800 to 1828 inclusive.

Year.	Nature of Crop.	Price.	Quarters-	Year.	Nature of Crop.	Price.	Quarters
1800 1801 1802 1803 1804 1805 1806 1807 1808 1809 1810 1811 1812 1813	Bad Good	94 5	1,242,607 1,596,399 498,359 297,146 398,067 842,879 280,776 379,833 424,709 1,401,541 238,366 244,385 425,569 681,333	1816 1817 1818	Full average . Scarcity \ Not above ave- rage . Rather below average . A bove average . Below average . Vestly average . A average . A average . Scarcity . Scarcity .	66 10 54 5 43 3 51 9	228, 263 1,020,949 1,593,518 122,133 34,274 2 12,137 15,777 595,231 315,892 572,733 842,050

*In charging duties, and in conversions in the public accounts, the following quantities of flour or meal are respectively deemed to be equivalent to one imperial quarter of grain; namely, wheat-meal or flour, 302 lbs.; barley-meal, abstances and meal of maise or Indian corn, 304 lbs.; rye-meal, 494 lbs.; and cameal, 176 lbs.

In converting the weight of grain into measure, the rule adopted in the accounts of the Board of Trade, is that laid down in the act 1 & 2 Goo. 1V. c. 87, \$ 37, according to which, 57 lbs. wheat, 35 lbs. rye, 49 lbs. barley, 42 lbs. bear or bigg, and 38 lbs. cats, are respectively deemed to be equal to 1 Winchester bushed. These proportions give the following equivalents to 1 imperial quarter, namely, 470-37 lbs. wheat, 483-67 lbs. rye, 404-35 lbs. barley, 365-99 lbs. bear eggs, and 335-58 lbs. cats.

The Irish barrel of wheat, pease, beans, and rye, annual 20 stones, each of 14 lbs. avoirdupois:

The Irish harrel of wheat, pease, beans, and rye, equal 20 stones, each of 14 lbs. avoirdupois; the barrel of barley, bear, and rapeseed, equal 16 stones; the barrel of oats generally equal 14 stones; and the barrel of mait, 12 stones.

No. III. STATEMENT of the Quantities of Foreign and Colonial Corn entered for Home Consumption in the United Kingdom; the Imports from Ireland into Great Britain; the average Prices of British Wheat, Oats, and Barley, according to the London Gazette; and the Nature of the Crop for each Year, from 1829 to 1840 inclusive.

Year.	Nature of Cros.	Average Prices per Quarter.		Foreign & Co entered for C	olonial Grain Consumption.	Imports from Ireland into Great Britain.					
reas.	Nature of Crop.	Wh	eal.	L Barley		Onta		Wheat.	Other Grain.	Wheat.	Other Grain.
1899 1830 1831 1832 1833 1834 1836 1836 1837 1838 1839	Average Full average Nearly average Above average Abundant Above average Scarcity Under average	56 52 46 39 46 55 64 70	133481194610794	32 38 38 38 38 39 99 29 32 30 31 39	46701601104565	20 24 25 20 18 20 22 23 23 25 25 25 25 25 25 25 25 25 25 25 25 25	195455110115118	9rs 1,379,174 1,711,876 1,510,486 376,638 84,437 64,975 26,585 30,108 944,275 1,848,477 2,711,309 9,401,367	579,889 1,039,291 1,069,833 116,394 26,270 168,955 448,342 377,346 595,648 90,771 1,920,952 1,442,378	519,017 529,717 557,498 790,393 844,211 779,565 661,776 598,757 534,465 542,583 258,331 174,440	97- 1,788,397 1,685,804 1,871,684 2,200,474 2,803,230 2,013,153 2,017,662 2,359,515 2,495,698 2,931,719 1,964,818 2,133,566

No. IV. STATEMENT of the Quantities of Foreign and Colonial Corn Imported, Reexported, and Entered for Consumption, in each of the Years from 1829 to 1839, inclusive; also of the Quantities remaining in the Bonded Warehouses of the United Kingdom at the end of each of the said Years respectively.

	18	29,	10	330.	18	31,
	Wheat.	Other Grain,	Wheat.	Other Grain.	Wheat.	Other Grain,
South of Europe	0m. 1,242,346 275,551 5,650	19,796	0m. 1,269,666 93,900 76,654	15,709	533,436	
United States	113,818 34,574	140	184.299		464,793	2,466
Total Re-exported Entered for consumption In warshouse	1,671,939	971,690 79,138 579,839	1,677,949 34,696	749,444 63,510 1,039,291	2,3 19,486 6 3,073	1,171,920 43,545 1,069,833
	1832.		18	1853.		34.
	Wheat.	Other Orela	Wheat.	Other Grain	Wheat.	Other Grain
Imported from North of Europe	287,447 5,642	7,432	Ora. 171,962 852	4.771	99,596 99,596 56,446	1,216
British America United States Other places.	103,468 39,117	9	100,557		9,993 36,076	
Re-exported	28,384 464,068 288,189 376,638 702,293	171,149 119,849 116,394	98,768 84,037	150,673 25,603 26,270	202,043 159,499 64,975 774,185	379,847 24,583 168,955
III warvijoust		968,544 35.	892,869 18	365,996 36.		57.
	Wheat.	Other Grain	Wheat	Other Grain-	Wheat.	Other Grain,
Imported from North of Europe. South of Europe. British America. United States.	9rs. 39,981 2,174 17,107	28 650	97,294 1,611 5,150	587 4	975. 525,496 12,623 2,722	29,847
Other places	28,528	22	28,681		37,437	
Re-exported	89,035 132,223 28,565 681,158	79,878 408,342	255,037 30,108	80,089 377,346	578,315 308,192 244,275 644,671	68,267 595,648

		1838.			1839.	
	Wheat.	Onto.	Other Grain	Wheel.	Outs.	Other Grain.
Imported from Russin	41,408	10,220	1,994	9m. 8/2,890	9rs. 316,823	9
Russin	133,566	4,139	23.866			
Prussia	586,008	199	10,416			350,173 350,807
Germany		16,816	55,788			
Holland	88,011	23,698	4.907			
Belgium	18,437	468	1,648	94,873	21,196	6,884
Prance	60,831		784	311,182	5,640	
Spain		••••	7	17,794	••••	601
Italy	31,006	• • • • •	••••	341,180	••••	8
Malta	11,647	••••	••••	16,370	••••	1,660
Ionian Islands		••••	••••	13,998 43,757	••••	.:
Turkey	3,150	••••	••••	5,011	••••	1,772
British America.	5,404 11,356		40	7,769	• • • • •	36 279
United States	6.141		12	127,406		
Channel Islands	41,545	1.427	4.184		459	7,640
Other places.	892	-,,	2,745			4,996
Total		56,970		2.889.854	670,117	982,901
Re-exported	156,105	54,494			40,905	7.256
Entered for consumption	1.848.477	11,005		2.711.309		1,056,712
In warehouse	25,729	242,188			15,835	

No. V. A RETURN of the Highest and Lowest Prices of Wheat, and the Difference per Cent., in each of the Years from 1829 to 1838 inclusive, in England and Dantzic. (Par. Paper, 1840, No. 177.)

		Regland.					DANTEIC.				
Years.	Lowest.		Highest.		Differ. per Cent.	Lowest,		Highest.		Differ. per Cent.	
1899. 1830. 1831. 1839. 1839. 1835. 1834. 1836.	8. 55 55 59 51 49 40 36 36	d. 4 5 2 3 2 6 0 0 0	8. 75 74 75 63 86 49 44 61	d. 11 11 7 5 6 9	57: 55: 97: 94: 14: 92: 68: 17:	8. 30 99 40 98 96 93 90 91 93	d. 8 9 2 10 4 2 1	s. 60 48 49 42 39 98 24 34	d. 1 2 6 6 6 0 6 11 10	96 · 62 · 23 · 47 · 21 · 23 · 23 · 25 · 25 · 25 · 36 · 36 ·	

No. VI. Account of the Total Quantity of Foreign and Colonial Wheat and other Grain and Pulse entered for Home Consumption in the United Kingdom, from the time (15th July 1828) the Act 9 Geo. IV. cap. 60, came into operation, to the 5th day of January 1839; the Total Amount of Duty received thereon; and showing what that Duty was equal to per Imperial Quarter on the Aggregate Average of all this Period. 8

	Form	неи Рворис		Cozo	COLONIAL PRODUCE.				
	Quantities charged with Duty for Home Consumption.	Amount of Duty received.	Average rates of Duty.	Quantities charged with Duty for Home Consumption	Amount of Duty received.	Average rates of Duty.			
Wheat	Qrs. 6,777,690 1,389,982 2,138,584	£ 2,039,115 414,921 706,429	Per Qr. 6a. 0d. 6 0 7 2	Qr 519,530 314 8,977	£ 98,191 23 295	Per Qr. 3a. 9d. 1 6 0 8			
Rye. Pease. Beans. Indian Corn Buck Wheat.	164,885 475,922 550,616 102,713 37,361	35,546 176,920 965,776 19,271 11,906	4 4 7 5 9 8 3 9 6 4	6,592 5,489	635 384	i'ii i's			
Wheatmeal & Flour Oatmeal	Cwts.	191,978	Per Cwt. 1 9 5 11	Cwts. 895,745 1,843	41, 629 78	Per Cwt. 1 5 0 10			

IV. GENERAL OBSERVATIONS.

The inequality of the seasons is one of those obvious facts which force themselves upon the attention of all. Equally so is the fact, that this inequality is greater in a small than in a large district; and that, other things remaining the same, in proportion as the territory which supplies subsistence is extended, the difference in the productiveness of the seasons will be lessened. It is thus that, by leaving the domestic trade of a kingdom unshackled, the deficiency of one district is, in a year of season haves to compensate in a greater of less degree by the compensative abundance. domestic trade of a kingdom unshackled, the deficiency of one district is, in a year of scanty harvest, compensated in a greater or less degree by the comparative abundance of another; while the pressure is equalised throughout the year by the spontaneous operations of the corn-dealer, which force the people upon that timely economy in the consumption of food, which, from ignorance or improvidence, they might otherwise fail to adopt. But the merchant who equalises the supply of subsistence through all the countries of the world, performs, though on a grander scale, and in a more accurate manner, functions precisely analogous to those discharged by the domestic dealer,—in a manner more accurate, because the irregularity of the seasons in any territory is in an inverse ratio to its extent. On the same grounds, it is obvious that prices must be always variable in a limited market, and steady in proportion as the market is extended.

These principles, however, in so far as they relate to foreign trade, have seldom been allowed to exercise an unfettered influence over national policy. In this country, the exportation of corn was at one time prohibited; at another it was

ecountry, the exportation of corn was at one time prohibited; at another it was encouraged by a bounty; while at a third its importation was subjected to restriction. The last and but recent practice, being one about whose expediency opinion has been divided, we propose to state briefly the grounds upon which it was advocated, and the objections that are commonly urged against it.

The policy of restraining importation professes to have in view two objects:—
1st. To render the country independent of foreign supplies; 2d. To protect and

encourage agriculture.

1st. The first object was much insisted on in 1815, in consequence of the estranged position in which Great Britain had stood in reference to other countries during a considerable part of the last war; and it is still maintained, though perhaps less strongly than formerly. The opponents of the corn-law, however, urge that such a combination of foreign powers as should render importation impossible, that such a combination of foreign powers as should render importation impossible, or even difficult, is a contingency scarcely conceivable, and totally at variance with the experience of those countries, especially Holland, that have adopted a different policy: That it is even opposed to our own experience, in as far as we have been for many years in part dependent on other countries; a large portion indeed of the grain imported in 1810, in consequence of the deficient harvest of 1809, having been brought from France in the midst of war: Moreover, that we import from foreign countries cotton-wool and other materials necessary in manufactures, affording employment and subsistence to several millions of our population, but that the interests and feelings created and sustained through means of such transactions, instead of being feelings created and sustained through means of such transactions, instead of being

feelings created and sustained through means of such transactions, instead of being adverse to political security, are the surest guarantees of prosperity and peace.

2d. The duty on grain, considered in reference to the protection of British corngrowers, is to be viewed partly as a countervailing duty for their peculiar burdens, and partly as having for its object the securing to them of the home market.

(1.) The principal burdens imposed on the agriculturists exclusively, or in a higher degree than on others, are stated to be tithe and poor-rate, the countervailing duty for which is estimated by Mr M'Culloch at 5s. or 5s. 6d. a-quarter on wheat; namely, 3s. 6d. for tithe, and from 1s. 6d. to 2s. for poor-rate. On the other hand, it is urged by many that the agriculturists are not subjected to greater taxation than other classes. more especially since the late alteration of the poor-law. taxation than other classes, more especially since the late alteration of the poor-law, but that the contrary is the case, all the direct public taxes affecting the occupation of the farmer having been repealed; also that land is proportionally less burdened in Great Britain than in most other countries: Farther, that even admitting any

such extra taxation to exist, it is much more than counterbalanced by the charges attending the importation of so bulky and perishable an article as corn.

(2.) The surplus of duty on foreign grain beyond the peculiar burdens of the British corn-growers, is levied with the view of securing to them a preference in the home market, similar to the legislative privilege in this respect enjoyed by other than the second of industry; and they maintain that having laid out much capital on the branches of industry; and they maintain that, having laid out much capital on the faith of the continued existence of the present state of things, they are entitled to expect that it shall not be speedily altered. To this it is answered—That the "protection" of agriculture gives an enhanced value to the prime necessary of life; a circumstance eminently injurious to the general body of consumers, and particu-

larly to the manufacturers, whe, while the cost of feed is thus artificially raised, are engaged with foreigners in an arduous competition, the effect of which is to reduce profits and wages to the same level, whether on the Continent or in England: That the views entertained by the landowners themselves, as to their suffering from a change of the existing law, are exaggerated, if not unfounded; while, in the opinion of many, instead of being benefited they have been directly injured by the restrictive system, which, by holding out a fancied security, has led only to continued alternations of over-production, "agricultural distress," and short supplies. These observations have reference solely to the principle of a restrictive cornlaw. Whether, holding that a duty should be imposed, the present seals is injurious from its varying character, is no less a subject of controversy. The principal advantage expected from the aliding duty was, that it would tend to preserve uniformity of prices. But the extremes in the weekly averages, since it was introduced have been 56s. in December 1835, and 81s. 6d. in January 1839,—a difference of 126 per cent. Again, a graduated duty which fluctuates with the variations of price, can never be appreciated beforehand, and is, as is well known, a fertile source of delusion. Thus, suppose a merchant commissions a cargo of foreign wheat when the home price is 71s., and when, of course, the duty is 6s. 8d.; and suppose, at the same time, that when he brings his wheat to market the price has fallen 3c., that is, to 68c., he will in such case (besides loaing by the fall of price) have to pay a duty of 16s. 8d., or 10s. a-quarter more than his estimate. In the case of a rising market, the advantage, it is true, will be on the side of the corn-merchant; but a law which thus adds to the loss of an ansuccessful and to the profit of a successful as law which thus adds to the loss of an ansuccessful and to the profit of a successful as law which thus adds to the loss of an ansuccessful and to municated to the operations of the foreign grower, who, of consequence, limits his produce to the market upon which he can fairly calculate. In this way, the graduated duty prevents that early importation of grain which merchants would have recourse to even in the distant prospect of a scarcity, and leads to its being delayed until after the emergency has arisen, and when the payment of its price cannot be effected by shipments in the ordinary course of trade, but must be made suddenly in bullion,—a circumstance which generally leads to a pecuniary crisis. Such a crisis occurred, as is well known, in the sudden exportation of bullion to an immense amount in 1839, which led to the convulsion of the money-market, much distress in trade, and the narrow escape of the Bank of England from a suspension of specie payments.

No one can doubt the necessity of approaching with caution any alteration of the laws affecting so important a branch of industry as agriculture, because any great shock given to the corn-growers would be at the least as hurtful to others as to themselves. Under this impression many eminent authorities thought that the interests of all classes would be consulted by changing the late system for that of a fixed duty. And that this need not be high, in order to ensure safety to the landowner, might be inferred from the facts that, taking a series of years, the average price of wheat at Dantzic (the cheapest exporting port) was not under and average price of wheat at Lamine (the cheapest exporting port) was not under 35s., while, in the event of a demand from this country, it invariably rises to 40s. and upwards; and that the charges of transport, exclusive of the importer's profit, are fully 10s. a quarter. A moderate duty added, therefore, would obviously afford ample protection, more especially when it is considered that the average price of wheat in England, during the six years ending with 1857, was only 50s. 3d. a quarter; while, during the ten years ending with 1840, it was not more than 56s. 11 dd; and that, during the greater portion of this period, cultivation was never carried on with more spirit or success. Landlords should also keep in view that high rents do not altogether depend upon high prices: for the additions view that high rents do not altogether depend upon high prices; to the additions to the present, compared with the former rent-rolls, have been much greater than can be accounted for by the advance in the price of corn. This is owing to various circumstances,—to increased population and wealth,—to the better adapted applicircumstances,—to increased population and wealth,—to the betwee suspect application of capital to land, to greater economy, and to the progress of agricultural science. These causes of a rise of rents are still in action, and will continue to be so even with additional efficiency; and their progress will of course still further remove all chance of inconvenience from the abolition of the protective system.

^{* &}quot;The charges, in ordinary times," says Mr Porter of the Board of Trade, "of merely transporting a quarter of wheat from the north of Germany and the lower ports of the Battle to England, are stated, on good authority, to be 10s. 6d., in addition to all the charges on shipping; and I am assured that, in order to get back in London the cost of a quarter of wheat bought in the Dantzic market, with the lowest rate of mercantile profit, it must be sold at an advance of 18s. upon the original cost." (Effects of Restrictions on the Importation of Corn. p. 27.)

CORNELIAN. [CARRELIAN.]
COROMANDEL-WOOD, the produce of a tree of great size, is used in cabines
work, like sebra and rose wood. But it is inferior to the last in the brilliancy and division of its colours, having a dingy ground, and sometimes running into white streaks.

white streaks.
CORUNDUM. [ADMANTINE SPAR.]
CORVETTE (Fr.), a small vessel of war, usually carrying from 10 to 20 guns.
COSS, also called the Cos, Cros, Cross, and Hordary, is an Indian itinerary measure,
which varies in different places. It is generally distinguished into the stendard cos
and the common cos; the former is deduced from its proportion to a degree of the
meridian, the latter rests on popular computation. Thus the standard cos is, in some
places, 35 to a degree; in others, 37½, 40, and 45; while the common cos varies
from 1 to 2½ British miles. In the map of Central India prefixed to Sir John
Malcolm's Memoir, 42 cosses are reckoned to 1 degree. The Bengal cos of 1000
fathoms = 1 Brit mile 1 furlons 3 poles and 34 vards.

Malcolm's Memoir, 42 cosses are reckened to 1 degree. The Bengal cos of 1000 fathoms = 1 Brit. mile 1 furlong 3 poles and 3½ yards.

COTTON-WOOL, on COTTON (Dan. Bemuld. Du. Beomuel, Kateen. Fr. Coton. Ger. Benumevelle. It. Bembagia, Cotone. Por. Algodae. Bus. Chlobtschataja Busaga. Sw. Bemull. Sp. Algoden. Hindus. Rúhi. Malay, Kapas), a vegetable hair, or filamentous down, enveloping the seeds of different species of Geosyptism, a plant growing in warm climates, and indigenous to India and America. It is produced within peds which protect it from injury by dust or weather, until it is ripe and fit to be gathered, when the heat of the sun causes it to expand and burst open the ped. It is of a white or yellowish-white hue, possesses downy softness and warmth, and its delicate fibres are sufficiently long, flexible, and tenacious to admit of being spun into a fine thread. The usual distinctions of the plant are, let, Tree Cotton; 2d, Shrub Cotton; 3d, Herbaceous Cotton; of each of which there are several kinds,—the plant having a great tendency to run out into varieties.

which there are several kinds,—the plant having a great tendency to run out into varieties.

1st, Tree Cotton (G. Arboreum) is found in India, China, Egypt, the western coast of Africa, and in some parts of America. It only attains the height of from 12 to 20 feet; but another octton-bearing tree (Bombas esibs), seen in the West Indies and elsewhere, called familiarly the umbrella tree, attains the height of 100 feet. The produce of the latter, however, is of so short and brittle a fibre, that it is unfit for spinning or any other purpose, except stufing pillows and best it is unfit for spinning or any other purpose, except stufing pillows and best it is unfit for spinning or any other one or other of its varieties throughout the tropical parts of Asia, Africa, and America. In appearance it resembles a currant bush. Its duration varies according to the climate; in the hottest countries it is a perennial, while in cooler places it becomes an annual. In the former, two crops a-year are gathered, one from October to December, the other from February to April. The Guiana, Brazil, and most of the West India cotton is of this kind; the whole being also long stapled.

3d, Herbaceous Cotton (G. herbaceuse), by far the most useful and important of the three kinds we have noticed, is an annual plant cultivated in the United States, India, China, and many other countries. It attains the height of 18 or 24 inches. The seed is usually planted in rows in March, April, and May; and the cotton is gathered by hand, within a few days after the opening of the pods, in August, September, and October. It is to this kind that the planters confine their attention in the southern part of North America,—the places where cotton is most extensively cultivated, and where the following varieties are commonly distinguished:—1st, Nankeen Coton, abundant in produce, the seed covered with down, the wool of a dirty yellow colour, and usually low priced. 2d, Green-seeded Cotton, which, as well as the former, is grown in the upland and middle dis convex Georgia Cotton. This kind was at first chiefly raised in Georgia and South Carolina, but of late years it has been very greatly extended in Alabama, Mobile, and the Valley of the Mississippi. 3d, Sea-island or Long-staple Cotton, the finest of all, is distinguished by the black colour of its seed, and the fine yellowish-white, strong, and silky long staple by which it is surrounded; it is grown in the lower parts of Georgia and South Carolina, near the sea, between Charleston and Savannah, and on small islands adjoining the shore. Owing to the peculiar combination of circumstances requisite for the production of this kind, it forms only a trifling proportion (about 12,000,000 lbs.) of the cotton grown in the United States; nor is the quantity on the ingresse.

nor is the quantity on the increase.

All the varieties of the plant require a dry and sandy soil. Marshy ground is wholly unfit for it, and a wet season is destructive to the crops, which are besides precarious from the diseases to which the plant is subject, particularly blight pro-

COT 218 COT

duced by weiness at the roots. In general, it flourishes most luxuriantly, and yields produce of the best quality, on the coast, as is proved by the growth of the sea-island cotton, which is mostly exposed to the action of the ocean's spray; and a manure of sait mud is known to impart a healthful action to the plant, and to produce a staple at once strong and silky. To this rule, however, the fine Pernambuce cotton is an exception; also the Egyptian, the growth of the upper provinces being greatly superior to that of the Delta. In the United States, land fresh brought under cultivation will yield, on an average, from 1000 to 1200 lbs. per acre of cotton with the seed, which will give, of clean cotton, from 250 to 300 lbs.; but in the old states, the produce is not more than one-half of this quantity.

The operation of gathering the ripe cotton requires to be performed with great care; and its separation from the seeds is a work of some difficulty, and one with must be done effectually before the article is packed, otherwise it will become oily and mouldy, and by the particles of seed and dirt be rendered unfit for spinning. In Asia this is slowly performed by a rude hand-mill or roller-gin, by which not more than from 40 to 65 lbs. a-day can be cleansed. The sea-sisland cotton is still separated from the seeds by rollers, constructed however on a powerful scale; but,

more than from 40 to 65 lbs. a-day can be cleansed. The sea-island cotton is still separated from the seeds by rollers, constructed however on a powerful scale; but, excepting this kind, all the North American produce is cleaned by the saw-gin, invented in 1793 by Mr Eli Whitney, of Massachusetts, by which one man may separate 3 cwts. in a day. This invention forms an important era in the history of the cotton-trade, as, though the instrument injures, in some degree, the fibre, the process is so rapid as to have been the main cause of the cheapness of the short-stapled American cottons, and thus has powerfully contributed to the extension of its cultivation.

tension of its cultivation.

After the cotton is separated from the seeds, it is packed in large canvass bags, commonly with the aid of a screw or hydraulic press, into a very dense bale, for the convenience of transport. The bale of Virginia, Carolina, Georgia, or West India cotton weighs from about 300 to 310 lbs.; that of New Orleans and Alabama, from about 400 to 500 lbs.; the East India bale, 320 to 380 lbs.; the Brazilian, 160 to 200 lbs.; and the Egyptian, 180 to 300 lbs.

In the infancy of the manufacture, England obtained the raw material from the Mediterranean and Levant. In last century, the largest supplies came from the West Indies and South America; but before 1779, the quantity annually imported scarcely exceeded 5,000,000 lbs. In 1786, when the total imports were 19,900,000 lbs., there were brought from the British West Indies 5,800,000 lbs.; French and Spanish colonies, 5,500,000 lbs.; Dutch colonies, 1,500,000 lbs.; Frortguese lbs., there were brought from the British West Indies 5,800,000 lbs.; French and Spanish colonies, 5,500,000 lbs.; Dutch colonies, 1,600,000 lbs.; Portuguese colonies, 2,000,000 lbs.; Smyrna and Turkey, 5,000,000 lbs. Prior to the American revolution, it was raised to a limited extent in the southern colonies for domestic use; and after the peace of 1783, small quantities were exported from Georgia. It was not, however, cultivated to much extent for exportation until about 1791 or 1792. Soon after which it became the great staple of South Carolina and Georgia, and lately of the new states in the south-west. In 1791, the quantity exported was only 189,316 lbs.; but in 1794, it was increased to 1,501,760 lbs.; in 1800, to 17,789,803 lbs.; since which, owing to Mr Whitney's invention, and the industry and enterprise of the American planters, the exports have gradually risen to be in value equal to one-half of the whole domestic exports of the United States. [United States.] An equally rapid extension has occurred in the consumption of the article in this country, in consequence of the discoveries of Hargreaves, Arkwright, Crompton, Cartwright, and others, as noticed in the next article.

The following statements of the production and distribution of cotton in 1834 are derived from tables compiled by order of the American Congress, and presented to the House of Representatives by Mr Levi Woodbury, late Secretary of the United States Treasury.

Estimated Production in 1834.	Distribution in 1884.
lbe.	Iba.
United States	
Brazil 30,000,000	
Mexico and South America (exclusive	to other places 20,000,000
of Brazil)	
West Indies	
Egypt	to China 40,000,000
Other parts of Africa	
India	West Indies to England 4,000,000
Other parts of Asia	Brazil & West Indies to France 4,000,000
Other parts of the World 13,000,000	Revot & Turkey to England 1,500,000
Total 900,000,000	A 13 # 000 000
	Total473.159.090

The differences between the quantities produced in and exported from the several countries represent the probable consumption in the places of growth. Since 1834 the cultivation has been materially increased, particularly in the United States, India, and Egypt, to which heads, as well as those of the other countries of production, we refer for further information.

The following table exhibits the progress of the British trade since 1820; annexed to which is the average annual price of upland or bowed Georgia cotton, which is generally considered as forming a standard by which the value of other kinds is measured.

Account of the Quantities of Cotton-wool imported into the United Kingdom, and the Quantities Exported and Entered for Home Consumption; also the average prices of Upland or Bowed Georgia in each year, from 1820 to 1840 inclusive.

		Імровтя.					
Years.	United States.	Other Countries.	Total.	Exports.	Entered for Consumption.	Uplands per lb.	
A CHAI OF	lbs.	lbs.	lbs.	lbs.	lbs.	d.	
1820		61,673,481	151,672,655	6,024,038	152,829,633	111	
1821		39,065,875	132,536,620	14,589,497	137,401,549	9	
1822		41,805,862	142,837,628	18,269,776	143,428,127	81	
1823	142,532,112	48,870,391	191,402,503	9,318,402	186,311,070	81	
1894		57,192,460	149,380,122	13,299,505	141,038,743	81	
1825		88,096,592	228,005,291	18,004,953	202,546,869	121	
1826		46,749,198	177,607,401	24,474,920	162,889,012	64	
1827	216,924,812	55,524,097	272,448,909	18,134,170	249,804,396	64	
1828		76,008,353	227,760,642	17,396,776	208,987,744	61	
1829	157,187,396	65,580,015	222,767,411	30,289,115	204,097,037	51	
1830	210,885,358	53,076,094	263,961,452	8,534,976	269,616,640	64	
1831		69,341,225	288,674,853	22,308,555	273,249,653	61	
1832		67,075,772	286,832,525	18,027,940	259,412,463	68	
1833	237,506,758	66,150,079	303,656,837	17,363,882	293,682,976	91	
1834		57,672,350	326,875,425	24,461,963	302,935,657	88	
1835	284,455,812	79,247,151	363,702,963	32,779,734	326,407,692	101	
1836	289,615,692	117,343,365	406,959,057	31,739,763	363,684,232	101	
1837		86,635,067	407,286,783	39,722,031	368,445,035	8	
1838	431,437,888	76,412,689	507,850,577	30,644,469	455,036,755	62	
1839	311,585,800	76,569,426	388,155,226	37,515,303	355,781,960	8	
1840	488,572,510	104,392,994	592,965,504	38,673,229	531,197,659	6	

Of the 76,412,689 lbs. imported from other countries than the United States in Of the 76,412,689 lbs. imported from other countries than the United States in 1838, the latest year for which the particulars are given in the public accounts, there were brought from East Indies 40,217,734 lbs.; Brazil, 24,464,505 lbs.; Egypt, 4,751,923 lbs.; Colombia, 2,877,194 lbs.; British West Indies, 1,529,536 lbs.; Italy, &c., 996,764 lbs.; Turkey, 660,555 lbs.; Chili, 424,633 lbs.; Peru, 131,680 lbs.; other places, 558,165 lbs. The re-exportations are almost exclusively to Germany, Holland, Belgium, Russia, and Italy.

The enember of extrem desired from India has increased considerably within the

The supply of cotton derived from India has increased considerably within the The supply of cotton derived from India has increased considerably within the last ten years, owing to the great attention which is now paid to its cultivation by the Company. The average importation of the three years 1827, 1828, and 1829, was only 26,043,467 lbs., whereas that of the three years, 1837, 1838, and 1839, was 46,001,308 lbs.; being an augmentation of fully 75 per cent. On the other hand, the importations from the British West Indies have fallen off within the same period from about 5,000,000 lbs. to only 1,500,000; the cultivation of cotton having been for the most part abandoned by the planters, owing to the cheaper rate at which it can now be prosecuted in India and the United States.

"A few words must be said as to the distinguishing constitute of cultivation and in the said as the distinguishing constitute of cultivation.

which it can now be prosecuted in India and the United States.

"A few words must be said as to the distinguishing qualities of cotton-wool in the estimation of the manufacturer. The quality depends on the length, strength, and fineness of the fibre, or, as it is called in the trade, the staple; but these, which are the essential attributes of quality, are modified by the cleanliness and the colour. The different denominations of cotton-wool vary considerably from each other in these particulars, and the value is estimated accordingly. In cotton of the same denomination there is also a considerable difference in quality. In Ses-laiand cotton, which as a class is by much the most valuable, this difference is great; is very finest quality of this class, in ordinary states of the market, is worth three times as much as the common quality of the same class. The variation of quality in most of the other denominations is from 30 to 25 per cent., and in none of them is more than 50 per cent. Formerly, the usual distinction of the different sorts of cotton had reference to the colour, "yellow" and " white." But now, improved modes and processes of manufacturing have rendered colour of less importance than staple, and the broad distinction is therefore into " long-stapled" and " whort-stapled." The principal long-stapled cottons are Ses-islands, Brazilis of every kind, Demerara, West Indian, and Egyptian. The short-stapled cottons include such parts of the produce of North America as are grown in the interior of that country, and called Uplands, Orieans, Alabama, Mobile, &c., as

well as the East India cotion, Surat, Bengal, and Madras. Except the better qualities of Seciolands, there is no sort of cotton which is now confined in its use to any peculiar or exclusive purpose. By mixing different sorts together, and by careful management in preparing the mixture for the spinning, the manufacturers can now make a substitute for almost any particular kind of cotton, except the very best. It is only requisite to add, that the long-stapled cottons are generally used for the twist or warp, and the short-stapled for the west." (Beines' History of the Cotton Manufacture.)

The relative value of the different kinds introduced into this country will be seen in the following list, extracted from the Liverpool Price-current of 11th March 1841:—

	d. d.	l	d. d.
See-island1	4 to 30	Demerara	
stained	6 - 12	West India	. 6 - 84
Bowed Georgia		Peruvian	. 8
Mobile		La Guayra	
Tennessee		Carthagena	44 — 44
New Orleans		Smyrna	
Pernambuco		Egyptian	
Babia		Surat	
Maranham		Madras	
sew-gipped		Bengal	

The expense of bringing cotton to this country from New Orleans and Mobile is about id. per lb., and from the Atlantic States, id. to id. per lb. The American planters frequently consign it for sale on their own account, but the greater part is sent by mercautile houses. About nine-tenths of the whole imports to this country are brought to Liverpool, where it is sold by brokers, who charge 10s. per £100 for their trouble. The same commission is demanded by the brokers employed to purchase for the spinners or dealers. The sales are made by sample, and owing to the strict probity of the brokers, they are conducted with unparalleled facility and despatch; and though not made with the formalities necessary to render the bargains legally binding, yet a difficulty in their fulfilment is almost unknown. Any misunderstandings which do occur are promptly and satisfactorily settled, by a reference to some neutral broker. The credit allowed is 10 days, at the end of which time the usage is to give a banker's bill payable in two months.

STATEMENT showing the Number of Bags and Bales of Cotton Imported, Exported, taken for Consumption, and the Stock on hand in London, Liverpool, and Glasgow, each Year, from 1830 to 1841, both inclusive.*

Years. Imported, d	Experted and destroyed by Fires, &c.	Taken for Consumption.	Strek on let January in each Year.				
			In London.	In Liverpool	In Glasgow.	Total	
	Bage.	Baga.	Baga.	Bags.	Baga	Bags.	Bags.
1830	870,750	35,800	805,250	77.070	913,250	8,962	289,582
1831	901,764	80,699	862,205	42,859	258,100	21,268	322,220
1832	902,940	65,100	858,434	37,381	212,350	26,575	276,306
1833	931,796	79,066	877,589	34,109	197,960	13.058	245,196
1834	946,585	90,895	883,290	35,243	180,780	9,127	215,150
835	1,089,309	107,240	937,616	26,296	145.311	13,963	185,560
1836	1,191,744	100.853	1.031.904	24,470	184,700	20,843	230.013
1837	1.163.839	198,535	1,064,931	60,820	204,590	23,500	289,000
1836	1 2 400 000	102,370	1,265,116	64,150	170,853	24,370	250,373
1839	1.109.550	121,659	1,043,511	46,450	248,349	26,300	321,096
840		196,045	1,274,729	81,640	206,049	27,790	265,479
1841		,	-,-,-,,	80,660	366,140	47.948	464,048

The import duty on cotton wool (exclusive of the late addition of 5 per cent.) is

2s. 11d. per cwt.; but if the produce of, and imported from, any British possession, only 4d. per cwt. This duty, in the year 1840, amounted to £650,000. So COTTON MANUFACTURE. The birthplace of this branch of industry is India, where it probably flourished long before the date of authentic history. In India, where it probably nourisned long before the date of authentic history. In China, throughout which the manufacture is also very generally diffused, it is not supposed to have existed before the beginning of the sixth century of the Christian era. In the tenth century, the cotton plant is stated by Mr Baines to have been extensively cultivated, and its produce woven into cloth by the Mohammedan possessors of Spain, where, and especially at Barcelona, the manufacture long flourished. At a later period (probably about the close of the 15th century), it was introduced into Italy, then the channel through which the fabrics of India

^{*} In "Burn's Commercial Giance," from which the preceding table is extracted, the average weight of the bags or bales of cotton is given as follows:—American, 373 lbs.; Brazil, 171 lbs.; Egyptian, 294 lbs.; East India, 363 lbs.; West India, 316 lbs.; and of the whole consumed in this country, 346 lbs.

were distributed to the rest of Europe. The wool consumed by the Italian manufactures is supposed to have been obtained from the southern shores of the Mediterranean, in most of the countries bordering on which, cotton is known to have be cultivated and converted into clothing in the beginning of the 16th century, and

cultivated and converted into clothing in the beginning of the 16th century, and probably before. From Italy the manufacture found its way into the Netherlands, from whence it is supposed to have been brought to England by protestant refugees after the capture and ruin of Antwerp by the Duke of Parma in 1585.

It is unnecessary, and would indeed be difficult, to trace the introduction and history of the manufacture into the other parts of Europe where it is new established; but its growth has, in every case, been subsequent and greatly inferior in extent to its progress in England, though even here it was long unimportant. In 1641, Roberts mentions, in his "Treasure of Traffic," that at Manchester "they buy cotton wool in London that comes first from Cyprus and Smyras, and at home work the same and perfect it into fustians, vermillions, dimities, and other such stuffs, and then return it to London, where the same is vented and sold, and not seldom sent into foreign parts, who have means, at far easier terms, to provide themselves of the said first materials." But the cotton manufacture made very slow progress in this island for more than a hundred years after the time when Roberts wrote. At the commencement of the last century, the importation of cotton-wool wrote. At the commencement of the last century, the importation of cotton-wool into the kingdom scarcely exceeded 2,000,000 lbs. annually, and of this quantity a large portion was used for candlewicks, a purpose to which it had been long applied in this country. Even down to 1760 the manufacture, if it deserved that name, was mostly carried on by weavers scattered over the country in cottages, who purchased what wool they wanted, each on his own account, got it spun into thread by their wives and children, and plied their looms only during part of the

day, the rest of which was spent in digging their gardens.

From the year 1760 we may date those improvements which have given to England the appellation of "the second birthplace of the cotton manufacture." The system was then begun by the Manchester merchants of distributing supplies The system was then begun by the Manchester merchants of distributing supplies of wool among the weavers by means of agents, who travelled over the country for that purpose at stated times. About that time also the fy-shuttle (invented by John Ray of Bury in 1738) was generally introduced into the cotton manufacture; while his son Robert in the same year invented the drop-box. These inventions placed the operation of weaving in advance of that of spinning,—a process which until now had been performed by the distaff, or one-thread wheel, and the supply of the process and more insidequate every day. At length in 1767, I are eller. until now had been performed by the distaff, or one-thread wheel, and the supply of yarn became more and more inadequate every day. At length in 1767, James Hargreaves, an illiterate but ingenious mechanic, invented the spinning-jenny, a contrivance which was speedily followed by the greatly more important one of spinning by rollers by the scater-frame, or threatle, for which a patent was taken out in 1769 by Richard (afterwards Sir Richard) Arkwright, a hairdresser, and which, from that time, communicated altogether a new character to the manufac-

Hitherto no goods entirely composed of cotton had been made in England. In what were called cotton cloths, it was only the west or transverse thread that was of cotton; the warp, or longitudinal thread was always of linen yarn,—it not of cotton; the warp, or longitudinal thread was always of linen yarn,—it not having been found possible to spin the cotton into thread sufficiently strong and hard for the latter purpose. But the yarn spun by Arkwright's machinery being strong enough to serve for warp as well as woof, cloth was now woven entirely of cotton. This important innovation was introduced in 1773, and the greater cheapness of production encouraged the consumption of the article both at home and abroad. In 1785, after a tedious lawsuit, Arkwright's patent was annulled, and the invention of the water-frame being thus thrown open, a great increase in the number of factories took place. After this event, also, the mule-jenny, a combination of Hargreaves' spinning-jenny and Arkwright's water-frame, which had been some years before (1779) invented by Samuel Crompton of Bolton, came into general use: it is only by the mule that cotton-thread of the finest qualities can be soun. SDUD.

The first steam-engine for a cotton-mill was made by Mr Watt in the year 1785.

^{*} Mr Baines has satisfactorily established that the merit of this discovery, though claimed by Arkwright, truly belongs to John Wyatt of Birmingham, who made it the subject of a patent so early as 1735; but wanting the means to realize his success, the invention slumbered till it was either re-discovered, or what is more probable, till its principles came accidently to the knowledge of Arkwright, who appreciated its value, and whose perseverance, talent, and good fortune enabled him by its means to enrich himself and his country. The invention was also claimed by Thomas Highs of Leigh.

But at this time the application of the improved machinery was confined to the production of yarn; and as formerly the difficulty had been to find thread enough to feed the looms, so now it seems to have been apprehended that it would be impossible to find a sufficient number of weavers to work the thread that was spun. This to find a sufficient number of weavers to work the thread that was spun. This great desideratum was, however, supplied by Dr Carwright, who invented the power-loom. This invention took place as early as 1785, but no practical application of it was made until 1801; nor was it until several years afterwards that the difficulties attendant upon its first employment were overcome. These inventions were followed by that of the dressing-machine, of the cylinder printing-machine, and of machanical engraving, and by the discovery of the various and beautiful processes of calico-printing, and of important improvements in the art of bleaching. More recently the process of spinning has been further facilitated by the self-acting-mule of Mr Roberts. The combined effect of these splendid inventions and discoveries has been, as is well known, the progression of the manufacture with gigantic strides, until it now composes nearly the one-half of our external trade, and affords subsistence to a portion of our population exceeding in amount that of several of the continental kingdoms.

external trace, and anorus subsistence to a portion of our population exceeding in amount that of several of the continental kingdoms.

The different processes through which the cotton passes, in its conversion into cloth, all of which are performed in many of the large spinning and weaving mills, are briefly described by Mr Baines as follows:—

cloth, all of which are performed in many of the large spinning and weaving mills, are briefly described by Mr Baines as follows:—

"The cotton is brought to the mill in bags, just as it is received from America, Egypt, or India, and is then stowed in warshouses, being arranged according to the countries from which it may have come. It is passed through the willow, the scutching-machine, and the operacing-machine, in order to be opened, cleaned, and evenly spread. By the carding-machine, in order to be opened, cleaned, and evenly spread. By the carding-machine, the fibres are combed out, and laid parallel to each other, and the ficece is compressed into a sliver. The aliver is repeatedly drawn and doubled in the drawing-frame, more perfectly to straighten the fibres, and to equalist the grist. The roving-frame, by rollers and spindles, produces a coarse and loose thread; which the swale or through the year. To make the warp, the twist is transferred from cops to bobbins by the estating-machine, and from the bobbins, at the everying-beam. The latter is then placed in the power-loose, by which machine, the shuttle being provided with tops of welf, the cloth is woven.

"Such, without entering too much into minutise, are the processes by which the vegetable wool is converted into a woven fabric of great beauty and delicacy; and it will be perceived that the operations are numerous, and every one of them is performed by machinery, without the help of human hands, except merely in transferring the material from one machine to another. It is by iron fingers, teeth, and wheels, moving with exhaustless energy and devouring speed, that the cotton is opened, cleaned, spread, carded, drawn, roved, spun, wound, warped, dressed, and woven. The various machines are proportioned to each other in regard to their capability of work, and they are so placed in the mill, as to allow the material to be carried from stage to stage with the least possible loss of time. All are moving at once,—the operations chasing each other; and all

The principal and original seat of the British cotton manufacture is Manchester, Including the district lying within from thirty to fifty miles around it, which is more important for the quantity, variety, and excellence of its productions than all the others together. The departments of spinning, manufacturing, bleaching, and printing, are all here carried to the highest perfection. The Manchester mills supply the finest yarms; and almost every description of cotton goods, except lace and hosiery, is made in Lancashire. Besides Manchester, four other great districts and nosiery, is made in Lancashire. Besides Manchester, four other great districts are distinguished by their cotton manufactures, namely, let, Glasgow, and the country around it, extending to Perth and Aberdeen; 2d, Nottingham, including Derby, Warwick, and Lichfield; 3d, Carlisle, branching out so as nearly to meet the Manchester and Scottish divisions; 4th, The counties of Antrim, Armagh, Dublin, and Kildare, in Ireland. The Glasgow district is chiefly celebrated for muslins and bandanas; the Nottingham, for lace and cotton hosiery. [Lacs. Hosiery.] Calico printing is carried on chiefly in the neighbourhood of Manchester, in the valeur by Backburn. Cliberge. and Bruy, and in the vicinity of Glasgow. leys between Blackburn, Clitheroe, and Bury, and in the vicinity of Glasgow, Dublin, and London. The principal bleaching works are in the neighbourhood of Bolton, Blackburn, Manchester, and Glasgow.

The following tables exhibit the course and progress of our export trade in

cottons, and the quantities of the different descriptions of these goods which composed the shipments at different periods.

Account of the Declared Value of Cotton Manufactures, and of Cotton Twist and Yarn, exported to different Countries in the Years 1820, 1830, and 1838.

	1820.		1830.		1838.	
	Macufacturus.	Twist and Yara	Man ufustures.	Twist & Yarn.	Manufastures.	Twist & Yes.
Russia	£ 702.125	£ 1,094,303	£ 155,975	£	£ 64,755	£ 1.236,584
Prossia	205,554	7,468	59	3,370	98	1,279
Germany	2,763,989	1,404,519	1,478,570	1,449,591	1,065,047	
Holland	979,681	55,261	646,689	612,925	634,041 194,855	1,864,599 11,740
France	1,821		10,001		172,026	48,971
Portugal, Azores, & Madeira	792,825	13,401	630,111	14,276	744,912	27,636
Spain, the Balearic Islands, and Canaries	140,010	,	920,006	-		
Gibraltar	837,836		145,404	1,044 433,754	600,908 1,379,082	
Italy and Italian Islands Malta	1,336,831 175,593		1,758,995 74,339	19,296		696,503 21,048
Turkey	2,0,000		(861,759		1,321,069	985,314
Egypt	352,894	61,258	71,594	8,946		
Barbary States	28,502		96.971	54	59,930 187,377	326
Cape of Good Hope	68,673		122,245	1,296		
Manritina		••••	67,945		169,986	
East Indies and Ceylon	****	}	1,562,574	333,286	{1,805,449	
China. Java, Sumatra, Siam, &c	850,882	24 }	114,409	2,040	(022,00/	217,047 27,959
Australasia	12,749	78	45,767	848		749
British America	176,884		375,597	8,803	402,972	14,894
West Indies	1,072,087	548	645,768	698	989,674	3,609
Poreign West Indies United States	451,782		541,804 2.305,165	3.596	679,643	
Mexico)	1,194,305	220	8,300,103	32,026		
Central America	454,210	649	146,643	•		
Colombia)					94,960	90
Brazil States of La Plata	964,080	••••	1,416,167 344,310	650 587	1,657,702 486,923	
Chili		l ::::	372,610		972,023	
Peru			233,650		221,679	1,600
Channel Islands	74,253		81,128			155
Other places	52,503	25,245	108,819	29,581	85,450	89,946
Total	13,690,109	2,826,639	15,294,923	4,133,741	16,715,857	7,431,869

STATEMENT of the Quantity and Declared Value of British Cotton Manufactured Goods Exported from the United Kingdom, distinguishing the descriptions of Goods in various Years since 1820.

		(800-04-1)	1830.	1835.	1838.
white or plain cottons $\{value : \mathcal{E}\}$ rinted or dyed cottons $\{value : \mathcal{E}\}$ value \mathcal{E} losiery and small wares, value \mathcal{E} pounds	5,451,024	6,027,892 178,426,912 8,205,117 919,787 32,641,604	6,562,397 199,799,466 7,557,373 1,175,153	1,240,284 83,214,198	7,293,831 326,719,777 8,260,902 1,161,124 114,596,602

If the first and last years in this table are compared, it will be seen, that while the number of yards exported in 1838 is greater by 178 per cent. than the number exported in 1820, the increase in the declared value has been scarcely 18 per cent.; the average price a-yard, which in 1820 was 12-14-d., having fallen in 1838 to 5-14-d. The quantity of twist exported has increased in the same period 398 per cent., while the increase in the declared value is not more than 163 per cent. The average price of twist, in 1820, was 2s. 5-14-d., and in 1838, only 1s. 3-14-d. a-pound. We may thus form some judgment as to the economy which has been introduced into the process of manufacture between 1820 and 1838, and are, besides, able to apportion that which appertains to the spinning and to the weaving branches respectively,—holding, what may reasonably be supposed, that the average qualities of

cloths and twist should have been the same at both periods. The diminution of value in the twist amounts to 47 per cent, and in the cloth to 55 per cent.: hence, by far the greater part of the saving occurs in the spinning processes,—a circumstance which may in part account for the greater proportionate increase in the exportation of twist and yarn.

In Mr Baines' work, an account is given of the extent and value of the British cotton manufacture in 1833, of which the following is an abstract:—

Cotton-wool imperted, 303,686,637 lbs.; consumed in the manufacture, 282,675,300 lbs. Yara spun (edetecting 1) on per lb. for leen), 286,174,400 lbs.; a number of hanks spun (averaging 40 to the lb.), 10,246,975,000; length of yara spun (840 yards to the hank), 4,800,802,182 miles. Value of the cotton-wool consumed, at 7d per lb. £8,344,693; value of manufactures consumed at home, £12,879,693; and of exports, £18,489,000; making total annual value of the manufacture, £31,338,683. Capital employed in the manufacture, £34,000,000.

Number of persons supported by the manufacture, £34,000,000 poratives in the spinning and weaving factories in England, 300,000; in Bootland, 32,000; in Ireland, 5000; total, 237,000. Handloom weavers, £30,000. Wages earned by the factory operatives, £8,044,000; by the hand-loom weavers, £4,375,000.

weavers, £4.375,000.

Weavers, year moved by the factories, 33,000 horses; water, 11,000 do; total, 44,000 horse-power. Number of spindles, 9,333,000; number of power-tooms, 100,000.

In 1840, the quantity of cotton-wool entered for home consumption was 531,197,559 lbs., being an increase of 81 per cent. beyond the amount in 1833, when the foregoing estimates were formed; and the value of the exports had increased to £24,661,179 (of which £7,099,468 was composed of yara and twist), being an augmentation of 33} per cent. since 1833. At the present time, therefore, we may fairly estimate the annual value of the manufacture as being at least £40,000,000, and the capital invested in it at nearly the same. This last estimate of the capital is much less than what the above proportions would indicate having been made on the assumption.

invested in it at nearly the same. This last estimate of the capital is much less than what the above proportions would indicate, having been made on the assumption that, though a considerable increase must have taken place on the fixed capital on buildings, and machinery, since 1833, it is probable no great addition has been made on the floating capital, as, owing to quicker returns, the same amount own suffices for the transaction of a larger amount of business.

The foreign countries in which the cotton manufacture is chiefly prosecuted will be seen from the account given in last article of the production and distribution of the raw material. It exists on a considerable scale in the New England states of America, and in France, in each of which the produce of the manufacture may be estimated at nearly one-fourth that of Great Britain. It is also advancing in Saxeny, Prussia, Switzerland, and Lombardy. The Americans, from their proximity to estimated at nearly one-tourin that of Great Drivain. It is also advanting in acknery, Frussia, Switzerland, and Lombardy. The Americans, from their proximity to the cotton-growing districts, possess an advantage in those articles where the value of raw material exceeds that of the workmanship; and in Germany and France perhaps a superiority exists in some descriptions of hosevery and yarms; but in a general point of view, England commands a superiority over all the nations of the world in regard to the cotton manufacture; and in other countries this branch of

industry is only maintained under a system of protection.

In no way is the superiority of the British manufacture more strikingly shown than in the extent of the triumph it has gained over the cotton fabrics of India. formerly reckoned so beautiful and cheap, that nearly all the governments of Europe thought it necessary to prohibit them, or to load them with heavy duties, in order to protect their own manufactures. Now, however, the British manufacin order to protect their own manufactures. Now, however, the British manufacturer brings the cotton of India from a distance of 12,000 miles, commits it to his spinning-jennies and power-looms, carries back their products to the East, making them again to travel 12,000 miles; and, in spite of the loss of time, and of the enormous expense incurred by this voyage of 24,000 miles, the cotton manufactured by his machinery becomes less costly than the cotton of India spun and woven by the hand near the field that produced it, and sold at the nearest market.

A duty of 10 per cent. is imposed on foreign cottons, and of 20 per cent. on made up articles. Partly from this cause, but mainly from the superiority of the British manufacture, the importations are comparatively trifling, chiefly consisting of Indian piece goods, with hosiery, yarn, and other articles from Germany and France. S

COUPONS (Fr.), warrants for payment of the periodical dividends on public stocks, a number of which, being appended to the bonds, are severally out off for presentation as the dividends fall due. The practice of appending coupons to bonds prevails chiefly in reference to foreign stocks.

COVADO, a Portuguese cloth measure equal 26 Imperial inches.

^{*} In cotton yarn measure, a thread = 54 inches; a akein or rap of 80 threads = 130 yards; a hank of 7 akeins = 840 yards; a spindle of 16 hanks = 15,120 yards.

COVID, an Oriental cloth measure. In China it is equal to 14g Imperial inches;

in Bombay, to 18; in Madras, to 18; ; and in Malacca, to 18;.

COWITCH, on COWHAGE, an article of the materia medica, consists of the bairs growing upon the pods of different species of Mucuna, a large twining plant found in India and other tropical countries, in hedges, thickets, and about water-courses. They are slender, brittle, easily detached, and readily stick into the skin, and produce an intolerable itching. Cowitch is used as a vermifuge, by being mixed with syrup till of the consistence of honey. Before the pods are ripe, and their hairs hardened, they are employed as a vegetable like kidney-beans, and are said to be delicious.

cowrites (Cyprea moneta), small, white, glossy shells (Cyprea moneta), found in abundance on the shores of the Maldive and Laccadive islands. They are used in India and in some parts of Africa as a minor currency. In Calcutta they are employed in Kauchau accounts, the method used in small bazars by the natives, reckoning 4 cowries = 1 gunda; 20 gundas = 1 pun; 4 puns = 1 anna; and 4 annas = 1 cahun. The value of the cahun fluctuates according to the abundance or scarcity of cowries, but it is commonly equal to about a quarter of a rupee; at this rate, 5120 cowries = 1 rupee.

CRAR B. a synthesis and Cancer naguras. Linn.) common on the rocky.

CRAB, a crustaceous animal (Cancer pagurus, Linn.) common on the rocky shores of Britain and Western Europe. Crabs are brought to market both in a shores of Britain and Western Europe. Crabs are brought to market both in a boiled and in a raw state. If the distance be great, they are placed in a well-box, which is attached to the outside of the fishing vessel; and in this manner they are conveyed to London even from Norway and other remote parts. The animal is so tenacious of life, that it does not lose its vital powers until two or three days after leaving the sea. May, June, and July are the months in which it is generally out of season. The male is of greater value than the female, and has larger claws. Before boiling, a good crab is known by the roughness of its shell, particularly on the claws. When boiled, its quality is known by holding the claws tight, and shaking the body, which will rattle or seem as if water were in the inside, if it be not in perfection. CRAB, a tree, the common kind of which (Pyrus malus) is found native in many parts of the United Kingdom, particularly on the eastern slopes of the Welsh mountains. Its timber is compact, and answers well for turning, and for the working parts of machinery. On a rich soil, the tree yields a small kind of apple, the sour juice of which, previous to the introduction of the modern methods of obtaining vegetable acids, was in request under the name of verjuice. Such apples are now only used for feeding hogs.

CRANAGE, a common port-charge for the use of a crane by which goods are lifted out of a ship.

lifted out of a ship.

CRANBERRY, the fruit of a slender trailing kind of shrub, of which there are two species. The English or Russian cranberry (Osycocous palustris), common in the bogs of Norfolk, Lincoln, Scotland, and other parts, is a round, austre, red berry, about the size of a common current: the American cranberry (O. macro-common common current) recombles the other, but is larger, has a more medicinal taste, and is concorpus resembles the other, but is larger, has a more medicinal taste, and is considered of inferior quality; it is imported in considerable quantity from the United States. Cranberries are much used by the pastry-cook for making tarts and some

kinds of marmalade.

CRAPE (Fr. Crépe. Ger. Flohr. It. Espumilla. Por. Sendal. Sp. Crespon), a light and transparent silken fabric, made with hard silk of the natural colour,—the warp being usually composed of singles, the shoot frequently of the same material, but sometimes when a closer texture is required, of two-thread tram. The peculiar appearance of this article is given to it in the operations of dyeing and dressing after it is woven; and "different manufacturers affect a degree of mysdressing after it is woven; and "different manufacturers affect a degree of mystery with regard to their peculiar modes of dressing crape, possessing or imagining thence some superiority over their rivals in the manufacture" (Lardner's Silk Manufacture). Crape is generally dyed black, and, from its sombre appearance, has always been considered as adapted to mourning vestments. The manufacture is established in various parts of Norfolk, Silkold, Essex, Somerset, and at Panders-End in Middlesex, but it has of late years decreased. [Silk Manufacture.] CRAW-FISH, a long-tailed crustaceous animal (Astacus fluviatile) of the lobster kind, found in the fresh waters of Europe and the north of Asia. It thrives best in rivers, and is commonly taken by nets or bundles of thorns in which flesh in a state of decomposition is placed.

CRAYONS, a material for drawing, are of two kinds,—native and artificial. The former is generally of a black, white, or red colour. The best black is a species of earth brought from Italy, of a bright even tint, and of a smooth and

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moderately hard texture. The best white is a kind of chalk, and is procured in France; it is of a brilliant colour, but very brittle. Pipe-clay is sometimes employed as a substitute, though of an inferior tint. Red crayon is a clayey ochreous kind of chalk. The artificial crayons are composed of earths of different colours, and other pigments, rolled into sticks with some tenacious substance, such as milk or beer-wort.

CREAM OF TARTAR. [Tartar.]

CREASOTE. [KREASOTE.]

CREDIT may be defined to be that confidence which subsists among commercial map in record to their mercantile affairs. This confidence operates in various

men in regard to their mercantile affairs. This confidence operates in various ways. It disposes them to lend money to each other; to bring themselves under

men in regard to their mercanne sharrs. This conductes operates in various ways. It disposes them to lend money to each other; to bring themselves under various pecuniary engagements by the acceptance and indorsement of bills; and also to sell and deliver goods in consideration of an equivalent promised to be given at a subsequent period. In a society in which law and the sense of moral duty are weak, and property is consequently insecure, there will of course be little confidence or credit, and there will also be little commerce.

"The day," says Mr Thornton, "on which it suits the British merchant to purchase and send away a large quantity of goods, may not be that on which he finds it convenient to pay for them. If it is made necessary for him to give ready money in return, he must always have in his hands a very large stock of money; and for the expense of keeping this fund (an expense consisting chiefly in the loss of interest) he must be repaid in the price of the commodities in which he deals. He avoids this charge, and also obtains time for preparing and adjusting his pecuniary concerns, by buying on credit; that is to say, by paying for his goods not by money, but by the delivery of a note, in which he promises the money on a future day. He is thus set more at liberty in his speculations; his judgment as to the propriety of buying or not buying, or of selling or not selling, and also as to the time of doing either, may be more freely exercised.

"But the custom of taking and of giving long credit has its inconveniences as well as its advantages. It increases the amount of the bad debts incurred in the course of commercial transactions. The apprehension of loss is therefore con-

"But the custom of taking and of giving long credit has its inconveniences as well as its advantages. It increases the amount of the bad debts incurred in the course of commercial transactions. The apprehension of loss is therefore continually operating on the mind of the lender as a restraint on the custom of giving credit, while the compensation he receives for the use of the capital which he supplies acts as an encouragement to the practice. The subsisting state of credit may in general be considered as resulting out of a comparison made both by lenders and borrowers, of the advantages and disadvantages which each discover that they derive from giving and taking credit. Mercantile confidence, however, is not always dealt out in that proportion in which there is reasonable ground for it. At some periods it has risen to a most unwarrantable height, and has given occasion to the most extravagant and hurtful speculations.—Evils of this kind, however, have a tendency to correct themselves. In a country possessed of commercial knowledge and experience, confidence, in most instances, will not be misplaced.

"Some persons are of opinion, that when the custom of buying on credit is pushed very far, and a great quantity of individual dealings is in consequence carried on by persons having comparatively little property, the national commerce is to be considered as unsupported by a proper capital; and that a nation, under such circumstances, whatever may be its ostensible riches, exhibits the delusive appearance of wealth. It must however be remembered, that the practice of buying on credit, in the internal commerce of the country, supposes the habit of selling on credit also to subsist, and to prevail, on the whole, in an exactly equal degree. In respect to the foreign trade of a country, the practice of dealing on credit indicates poverty or riches, in proportion as the credit generally taken is longer or shorter than the credit given." (Essay on Paper Credit, p. 15-19.)

Credit, though of itself it can add nothing to

sometimes be frost-bound and stagnant, did not credit, as it were, lend the heat to thaw it, and set it flowing. Supposing all credit to be prohibited, every capitalist who may be incapable of employing his money successfully, will either not invest it, or if he does, he will lose it; while those who have no capital, but are possessed of skill and capacity for its profitable management, are deprived of all opportunity of exercising the talent and activity with which they are endowed,—at least in the manner in which they might be most efficiently exercised. In both ways are inflicted private injury as well as public loss. But under a law permitting and protecting credit, the capital in the community is brought into combination with the skill of the community, and the result is the most productive application of both.

These observations, however, must be understood as having reference to that system of credit which is conducted upon fixed principles, and which prevails generally among persons in business, and not to that irregular description of it which frequently takes place betwixt the retailer and the consumer. The latter is a great social evil. It is opposed to habits of frugality and prudence, and in some branches of business has led to such flagrant abuses as in the opinion of many to justify the interference of the legislature. In a well-written pamphlet by Mr A. Rosser, solicitor, titled, "Credit Pernicious," and which produced a considerable sensation, the proposition was brought forward, "That in a great variety of cases, simple contract debts between 40s. and £100 shall not be recoverable by any suit or process whatsoever." Mr Rosser's proposed regulations, however, are deficient in clearness; and the exception which he would make of debts below 40s. would of itself open boundless facilities for escaping from the general rule. A much better plan has been advanced by Mr M'Culloch (Dictionary, art. Credit), namely, to take away all actions for debts under a given sum, as £50, or £100, with the single exception of claims for wages, or for labour done under executory contracta. This would be at least a simple and precise regulation, and one which would rarely admit of being evaded. But notwithstanding the eminent authority on which this innovation is recommended, we doubt its expediency. Admitting to the full extent the evils that have been alleged to attach to the existing system of unrestricted credit, and the right of society to refuse its recognition of any compacts between individuals, which shall be deemed to be in their general nature injurious,—we apprehend public opinion would scarcely tolerate some of the results, outraging all sense of natural justice, which the working of the proposed law would produce. Further, we apprehend, that instead of generally putting down the present practice of buying and sellin in certain cases, refuses to recognise loans of money where the rate of interest is higher than five per cent. The effect would be, that the premium paid by the customer for the accommodation which he sought would be raised. Improvident persons would not be kept out of tradesmen's books; they would only be more severely fleeced.

more severely fieeced.

The only proper remedy for the evils of the credit system, we believe, is to be afforded not by altogether depriving the creditor of his right to recover his debt, but by restricting the exercise of that right to its legitimate object. On the principle alone that the law should do as much as it can to uphold the dignity of human nature, we would abolish altogether imprisonment for debt, and keep that infliction exclusively for its proper use—the punishment of crime. We would consider the creditor as having no claim against the debtor himself, but only against his property. Upon the same views, we would protect likewise so much of the debtor's property as should be evidently necessary to enable him to obtain a subsistence for himself and his family. The workman's tools should certainly be exempt from scizure, and also the more indispensable articles of his household furniture. By such changes, we would mitigate whatever is unnecessarily harsh in the provisions such changes, we would mitigate whatever is unnecessarily harsh in the provisions of the law; but we should look to other influences rather than to any that legislation could exert, for the correction of mere habits of improvidence, and the protection of individuals from the inconveniences naturally consequent upon their own volun-

These views have, to a certain extent, been lately carried into practical operation,—in England by the act 1 & 2 Vict. c. 110, of which an account is given under the head Insolvency, and in Scotland by the 5 & 6 Wm. IV. c. 70, § 1, which provides that no person shall be imprisoned for a debt not exceeding £8, 6s. 8d., exclusive of interest and expenses. The establishment of County Courts, affording speedy and inexpensive modes of recovering debts, have mitigated many objections which had been urged against the credit system. [ACCOMMODATION.

BANK. FUNDS. MONEY.]

CRETE. [CANDIA.] CREW. [MASTER. SEAMAN.] CROCUS. [COLCOTHAR.]

CREW. [MASTER. SEAMAN.]
CROCUS. [COLOUTHAR.]
CROCUS. [COLOUTHAR.]
CRORE, in Hindoo numeration, signifies ten millions. It is used to express
100 lacs of rupees; and as each lac is 100,000 rupees, or nearly £10,000, the crore
is about £1,000,000 sterling.
CROTON, a plant used in medicine, and of which there are two kinds: 1st, The
Croton tiglium, a native of India, the seeds of which are about the size of a small
marble, of a convex shape on one side, and bluntly angular on the other, and
enveloped in a thin shell. These seeds are the most powerful purgative known.

"Five hundred doses may be contained in a small wafer box." In this country the medicine is used in the form of an oil expressed from the seeds. 2d, The Croton casoarilla, the bark of which finds a place in materia medica: it is imported from the Bahamas, either in curled pieces, or rolled up into short quills; is brownish, resinous, and shining, with a weak aromatic smell, and a bitter taste.

CROWN, a silver coin in Great Britain and other countries. On the Conti-

CROWN, a silver coin in Great Britain and other countries. On the Contanent it is known under the various names of couronne, ecu, patagon, and scudo. CRUSADO, the name given to two Portuguese coins: the old crusado, or crusado of exchange of 400 reis, and the new crusado of 480 reis. [PORTUGAL] CUBA, a noble West India island and Spanish colony, situated at the entrance into the Gulf of Mexico, between long. 74° 11' and 84° 58' W., and lat. 19° 47' and 23° 9' N. Area about 43,000 square miles, being nearly equal to all the other islands together. Population about 900,000, of whom, from one-third to one-half area whites nearly exact hird slaves, and the remainder free months of colour. By are whites, nearly one-third slaves, and the remainder free people of colour. By the former Spanish constitution, Cuba and Porto Rico, being integral parts of the monarchy, were governed like the provinces of Old Spain: they are now under the charge of a captain-general, who resides at Havana, the capital.

monarchy, were governed like the provinces of Old Spain: they are now under the charge of a captain-general, who resides at Havana, the capital.

A chain of hills runs through the centre of the Island from E. to W., from which the land gradually inclines on both sides towards the coast. The country is broken into hill and valley, and plains. The sides of the hills are in some situations cultivated, and are generally fertile; but the soil is liable to be washed off by heavy rains. The valleys and plains compose nearly four-fifths of the island, and are extremely productive, being in this respect unequalled in the West Indies, except, perhaps, by some parts of Hayti and Guiana; only a very small extent, however, is under cultivation. There are very few rivers, and none large; and a great portion of the island is subject to severe droughts. This disadvantage is remedied in some places by diverting the course of the streams for the purpose of irrigation. The climate, although tropical, indicate a transition to that of the temperate sone. The mean temperature of the interior is 78°, and call Havana 71°. The mean annual heat of Havana, in July, the hottest month, is 84°; the mean of the coldest is 70°, and the depression of the thermometer to 85° is rare. The N. winds are sometime violent; but hurricanes occur less frequently than in the other Antilles. The chief mineral product is copper, the mines of which, near Santiago, have of late years attracted considerable attention; several are worked by English and American companies, and a considerable quantity of ore is sent to Swanses, in Wales, to be smeltch. [Coppera.] The leading objects of culture are sugar, coffee, and tobacco, which form the great staples of the island; a variety of other tropical commodities are produced, but not in large quantities. Maize, rice, beaus, and a little wheat are asset, though not sufficient for the demand; also plantains, yuca, yams, and potatoes, which form the chief support of the coloured people and slaves. Immense tracts of land

Spanish colonies, the Hanse Towns, and France; also Russia, to which considerable quantities of produce are exported.

The value of the imports we have noticed does not include negro slaves, of whom about 25,000 are annually brought into Cuba; and to the low price of labour thus induced is in part attributed the increased production which has lately taken place. This infamous traffic is said to be protected by the government for the purpose of retaining the island more securely under the dominion of Spain. By an ordinance of 12th March 1837, free coloured people are prohibited from even landing on its abores.

The number of vessels which annually enter the ports is about 2500, one-half of which are from the United States; about 740 Spanish; nearly 200 English; 50 French, and the same number from the Hanse Towns and the Netherlands, respectively.

Hasseag, the chief port and capital of Cuba, and one of the greatest commercial cities of the New World, stands on the N. W. side of the island, in 23° 9′ N., 83° 23′ W., on a promontory formed on one side by the open sea, and on the other by a large bay nearly 23 miles in width;

pop. 130,000, of which nearly one-half reside without the walls. The entrance into the harbour is narrow and deep; and defended on the E. by the Moro Castle, and on the W. by Puntal. It opens into a secure and spacious basin, where there is sufficient depth of water for line-of-battle ships. About 1200 ships enter annually.

The chief other ports are, on the N. side of the island, Matanzas, and on the S. side Santiago-de-Cuba and Triniciad. Besides these, the following are licensed for foreign trade:—Puerto-Principe, Baracoa, Gibara, Cienfuegos, and Manzanillo.

MEASURES AND WEIGHTS, MONEY, DUTIES, &C.

MEASURES AND WEIGHTS, NONEY, DUTIES, &c.

Measures and Weights.—The standards of Spain are those generally in use. In trade the following proportions are commonly observed:—108 varas = 100 Imp. yards, or 1 vara = 33 Imp. life inches; the fances = 3 Winchester, or 29 Imp. bushels; the arroba of wine or spirits = 41 English wine gallons, or 342 Imp. gallons; the quintal of 4 arrobas, each of 25 lbs. = 1013 lbs. avoirdupols.

Money.—Accounts are stated in dollars divided into 8 reals, each of 34 maravedis, which are converted by merchants at the fixed rate of \$44 for £100, or nearly 4s. 6d. per dollar; the variance of the mounts in sterling. Bills on London are drawn at 60 days' sight; and the course of exchange being made by per centages upon the amounts in sterling. Bills on London are drawn at 60 days' sight; and the course of exchange fluctuates from about 6 to 20 per cent. on sugar, the export duty is 3 reals upon the amounts in sterling. Bills on London are drawn at 60 days' sight; and the course of exchange fluctuates from about 6 to 20 per cent. In spanish vessel, 214 per cent. premium; or £114, 1839, was "141 per cent. premium; or £114, 1839, was "142 per cent. premium the dollar = 4s. 2d. sterling.

The currency of the laland consists of gold doubloons, dollars, and their aliquot parts. [Doubloon, Lollar.] Paper money is unknown.

The Duties are mostly at colorem, the valuations of the goods being as far as possible fixed by the tariff. On Spanish goods brought direct from the Peninsula, it is 62 per cent.; but if brought in foreign vessels, 144, and in some cases 184. On goods imported from a foreign country in 5 panish vessels, 144 per cent. To these import duties in London on 5th March Havana and the first settlement was formed by the tariff. On Spanish poods brought direct from the Peninsula, it is 62 per cent. and in some cases 184. On goods imported from a foreign country in a foreign vessel, 214, and in some cases 184. On goods imported from a foreign country in a foreign vessel, 214, and in some

Cuba was discovered by Columbus in 1493; and the first settlement was formed by the Spaniards in 1511. In 1763, Havana was taken by the British, but it was restored to Spain at the peace of 1763. The slamd derives great political importance from its position, which gives it a control over the trade between Europe and all countries lying round the Caribbean Sea and Gulf of Mexico; as vessels returning to Europe from Jamalea, or the coast of South America, are under the necessity of doubling Cabo San Antonio, and proceeding homeward by the Gulf Stream, in order to avoid the opposing force of that current, and of the trade-wind which they have to encounter in attempting a passage either by the Windward or Mona Passages, situated respectively at the W. and E. extremities of Hayti.

CUBEBS (Du. Koebeben. Fr. Cubebes. Ger. Kubeben. It. Cubebi. Por. Cobebas. Rus. Kubebü. Sp. Cubebas. Jav. Kumukus), a kind of pepper, composed of the dried pedicelled berries of the shrub Piper cubeba, a native of Java. They are about the size of black peppercorns, but somewhat wrinkled, and having a short slender stalk. Their colour is externally gray, their smell aromatic, and their taste warm and camphoraceous. Cubebs are imported into Europe from Batavia and Canton, and are used in medicine.

CUBIT, a measure of length, equal 18 inches, or 1th of a fathom.

CUCUMBER, the cooling fruit of a well known annual (Cucumis sativus) of which several varieties are cultivated in this country, mostly in hothouses, the plant being a native of a warm climate. It is chiefly used with us as a salad or condiment; but in Egypt, Syria, and other eastern countries, where it is grown in fields, it forms a considerable part of the food of the lower classes, especially during summer; and its employment for this purpose is repeatedly noticed in

Scripture.
WILD CUCUMBER, or SQUIRTING-GOURD, a perennial (Momordica elaterium), is a native of the S. of Europe. The fruit is oblong, about 12 inch in length, and of a green colour; and its juice yields the purgative substance known in medicine under the name of elaterium.

the name of elaterium.

CUDBEAR, a dye-stuff, consists of a fine powder, of a violet red colour, and a

peculiar but not disagreeable odour; it is prepared in the same manner as orchell, from a species of lichen (Lecidea tartarea), imported from Sweden and Norway

under the name of rock-moss.

CUMMIN-SEEDS are obtained from an annual umbelliferous plant (Cuminum cyminum) resembling fennel, but smaller. It is a native of Egypt, though the seeds are imported chiefly from Sicily and Malta. They are of an ash-gray colour, oval, linear, flat on one side, convex and striated on the other; having a strong unpleasant smell, and a bitter, acrid, aromatic taste. They are to be chosen fresh, and of a greenish colour. These seeds are used in medicine, and also as a condiment.

condiment.

CURRANT, a hardy berry, produced by a bush (Ribes) common in all parts of this country. There are two species; one of a red or yellow colour (R. rubrum), remarkable for its mixture of sweetness and acidity; the other of a black colour (R. nigrum) without acidity, but containing a powerful and agreeable aromatic principle. Of the former, the finest varieties are, Wilmot's red, the White Dutch, Knight's sweet red, and the common white; of the latter, the best is the Black Naples. These currants are employed in confectionary, and in the manufacture of a kind of wine.

The fruit commonly known in commerce, however, under the name of currants, consists of the small dried grape or berry species of vine, chiefly cultivated in the Morea and the Ionian Islands, from whence about 170,000 cwts. are annually brought to the United Kingdom, where it is extensively used in the making of configurations.

puddings, confectionary, &c. S
CURRENCY, the current money of a country. [Coin. Money. Exchange.]

"The currency I consider to be, in strictness of language, according to the apparent derivation of the term, that part of the circulating medium, such as the coin of the realm, and Bank of England notes and country bank notes (although not a legal tender), which pass current from hand to hand without individual signature, such as appears on drafts or indorsements. I am doubtful whether cheques upon bankers might not be included, from their perfect similarity to bank notes, in many of the purposes for which they are employed; at the same time, there is the feature of distinction which I have mentioned, viz. that cheques require the signature of the party passing the draft, and that they do not pass from hand to hand. Bills of exchange I consider as a part of the general means of distributing the productions and revenues of the country, and therefore as constituting a part of the circulating medium. I consider also, that the simple credits by which goods are in many instances bought and sold, come likewise under the general description of the circulating medium, in as far as the prices of commodities are in question; because a simple contract of asle, whether any payment eventually passes or not, is commonly entered in the price currents without distinction from those for which any actual payment is made. I cannot consider that transferable debte (such as deposits in the hands of bankers, against which the depositors are entitled to pass their drafts) constitute circulating medium, but only the actual transfers." (Evidence of Thomas Teoks, Esg. Report on Banker of Jasse, 1960, p. 297.)

In some parts of Georgmany, and in the British colonies in the West Indies and

In some parts of Germany, and in the British colonies in the West Indies and North America, the term currency is applied to the monies of account only.

CUSTOMS, duties levied upon commodities imported or exported. The first statute authorizing the crown to levy such imposts in England was the 3d of Edward I.; and the method long employed in their collection was to affix a certain rate or value upon each kind of merchandise, and to grant upon these rates a subsidy, which was generally a poundage of 1s. for every 20s. of value fixed in the book of rates; a specific duty, or tonnage, being also charged on the importation of each tun of wine, and the exportation of each tun of beer. Hence, in the early acts relating to the customs duties, they are described as subsidies of tonnage and poundage. The system of poundage was continued until the reign of Charles II., when, as respects some articles, it was changed for that of specific duties. This course of substitution of specific rates, in place of the valuation of the subsidy, was continued from time to time, and other innovations being adopted, the simplicity of the ancient plan was at length destroyed. The embarrassment to traders thereby produced was increased by the number of acts of Parliament passed for altering the duties or regulations of this branch of revenue. Much was done to remedy these inconveniencies, by a consolidation act, introduced by Mr Pitt in 1787, by other acts of the same kind, and by a Digest of the Customs Laws by Mr Tickling, which was published by the Lords of the Treasury about the year 1815; but the utility of these arrangements and expositions having been impaired by numerous fresh enactments, the government were induced in 1823 to cause the preparation of a new set of laws for the consolidation of the customs. This work

was undertaken and performed by Mr James Deacon Hume, then comptroller of the customs in the port of London, and afterwards secretary of the Board of Trade; and the bills prepared by him form the subject of the eleven acts of the 6th Geo. IV. cap. 106, to cap. 116 inclusive, all passed in July 1825. These are as follows:—Ist, Act for the Management of the Customs; 2d, Act for the general Regulation of the Customs; 3d, Act for the Prevention of Smuggling; 4th, Act for the Encouragement of British Shipping and Navigation; 5th, Act for the Registering of British Vessels; 6th, Act for granting Duties of Customs; 7th, Act for the Warehousing of Goods; 8th, Act to grant certain Bounties and Allowances of Customs; 9th, Act to regulate the Trade of the British Possessions abroad; 10th, Act for regulating the Trade of the Isle of Man; and, 11th, Act for regulating Vessels regulating the Trade of the Isle of Man; and, 11th, Act for regulating Vessels carrying Passengers to foreign Parts. These statutes were brought into operation on the 1st January 1826; but the entire code was recast in 1853.

The produce of the customs in 1596, in the reign of Elizabeth, did not exceed £50,000. In 1613, it amounted to nearly £150,000, more than two-thirds of which were collected in London. At the Restoration, in 1660, it increased to £421,582; and were collected in London. At the Kestoration, in 1660, it increased to £421,582; and at the Revolution, in 1689, to £781,987. In 1763, the produce was about £2,000,000 in 1792, £4,407,000; in 1815, £11,360,000; in 1830, £21,084,525; in 1840, £23,466,117; in 1850, £20,442,170; and 1860, £21,997,513. In 1861, the exact amount received at the various Custom Houses in the United Kingdom in duties

on goods imported was £23,637,513.

CUSTOM-HOUSE, a term applied in a general manner to the establishment by means of which the customs revenue is collected, and its regulations enforced; and in a more limited sense to the building within which the business is conducted. The customs department of the revenue is at present managed by a board in Longitude of the customs department of the revenue is at present managed by a board in Longitude of the customs acting under the Transport, and by collectors don, consisting of nine commissioners, acting under the Treasury, and by collectors and other officers at the different ports. The regulations respecting the appointment, instruction, and conduct of the several officers are chiefly embodied in the act 16 & 17 Vict. cap. 107, and in orders issued by the Commissioners.

Officers in the customs taking any fee or reward, not allowed, shall be dismissed; and if any person (not in the customs) shall give, offer, or promise to give any such fee or reward, he shall forfeit £100 (3 & 4 Wm. IV. c. 51, § 8, and 16 & 17 Vict. cap. 107, sect. 2).
Officers of customs not liable to serve parchial and other local offices.
Holidays at the customs, only Christmas day and Good Friday, fast-days, and the birthday of Her Majesty, and which shall be kept us public holidays by the officers and servants of the dock companies in the United Kingdom.

CUSTOMS REGULATIONS. The regulations respecting the importation and warehousing and exportation of commodities are chiefly embodied in the Customs Consolidation Act (16 and 17 Vict. cap. 107; 18 and 19 Vict. cap. 96;

22 and 23 Vict. cap. 37; 23 Vict. cap. 22, and 25 Vict. cap. 22).

Very little alteration has been made in the regulations except such as have arisen from the alteration of the Navigation Laws, the progress of free trade measures, and reciprocity treaties with foreign nations, the modification of some penalties, the removal of restrictions on most goods imported or exported, the extension of warehouse privileges and custom houses to additional ports, and a few other minor matters.

We may specifically allude to the following alterations in the appended abstract of the old regulations. Sections 23, 26, and 29 are obsolete, the trading privileges of the East India Company having died out with the abolition of the

Company itself.

- § 27. Goods not entered within 14 days may be conveyed to the Queen's warehouse; and if the duties and charges are not paid within three months, the goods may be sold.
- § 44 to 47, are obsolete; as fish and oil of foreign taking are now entered duty free, no bounty or privilege whatever being given to British ships or British enterprise
- § 58. The list of prohibited or restricted articles has been very greatly narrowed, live animals, meat, fish of foreign taking, &c. are all admitted duty free.

§ 69 and 72. There is now no restriction on the export of coal.

§ 96. The following ports are now added to those enumerated: Liverpool, Hull, Shields, Aberdeen, Greenock, Dundee, and Waterford.

§ 99. The privilege is extended to other ports than those named. § 104. The prohibition to export tools, machinery, manufacturing engines, &c. is removed; indeed there is scarcely any restriction on the liberty of trade.

232 Abridgement of an Act for the general Regulation of the Customs, viz .: -- 3 &4 Wm. IV. c. 52, with the Alterations made by later Enactments.

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General Previolent, § 2. No goods to be unlade: from any ship, or bulk to be broken, after arrivar of such ship within four leagues of the coast, before due report and entry has been made, and warrant granted, in the time, place, and manner appointed by the act. All gueds not dely reported, or unisaden contrary to the act, are forfeited; and if bulk be broken contrary to the act, are forfeited; and if bulk be broken contrary to the act, the master of such ship forfeits £100; and if, after arrival within four leagues of the coast, any alteration be made in the stowage of the coast, any alteration be made in the stowage of the cast, or if any part be staved, destroyed, or thrown overboard, or any pethage be opened, the ship shall be altered to be altered to be altered and dated and signed by him at the place of taking on board, and authenticated as herein after provided. Every manifest must set forth the name and tonnage of the ship, the name of the master and of the place to which the ship belongs, and how the name and tonnage of the ship, the name of the master and of the place to which the ship belongs, and of the places of inding and destination, respectively, and contain a particular account and description,—of all the packages on board, with marin and numbers, and the sorts of goods and different kinds of each nort contained therein (to the best of the master's knowledge) and of the particulars of such goods as are stowed loose.

Berry manifest must set forth the names of the respective shippers and consignees, as far as the same can be known to the master; and to such particular account shall be subjoined a general account or recepitulation of the total number of the packages of each sort, describing the same by their usual names, or by such description,—of all the packages of each sort, described a general account or recepitulation of the total number of the packages of each sort, described a general account or recepitulation of the total numb

beyond the seas not under the British dominions, where tobacco has been taken on board for the United Kingdom, the master must produce the manifest to the British consul or other chief efficer, if any such reside at or near the place, who must certify upon it the date of production. § 6. If the manifest is wanting, or if any goods co tained in it be not on board, the master forfairs. Close

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co tained in it be not on board, the master forfeits £100.

§ 7. The master of every ship required to have
a manifest, must produce it to any officer of the
feet,
customs who shall come on board after his arrival
within four lengues of the coast, and who shall
demand an inspection; and the master must
deliver, to the officer who first demands it, a
true copy of the manifest signed by himself; and
must deliver another copy to any officer who
may be the first to demand it within the limits
of the port to which the ship is bound. The
officer must notify on the manifest and recent
of copies, and transmit the copies to the
colsector and comptroller of the port to which the
vessel is first bound, and return the manifest to
the master. A master failing to produce the
manifest, or deliver the copy, forfeits £100.

Report, § 8. The master of every ship arriving,
whether laden or in ballast, must, within twentyfour hours, and before bulk be broken, make re-

case the commissioners, in consideration of the cort or quality of the goods, or the small rate of duty payable on them, see fit to deliver them for exportation.

It is a sure of the cargo where a manifest is required, and, if required by the collector or comproduce the manifest of the cargo where a manifest is report or copy, for any and every part of the cargo, and answer all questions relating to the slip and the copy have not been signed by him, or any such copy have not been received or made by him previously to his leaving the place where the goods were shipped, the master forfsits £100.

It is a sum of the port at which some part has been delivered, must notify such delivery on the manifest, and return the same.

If it is a sum other port, the collector and compared to the port will admit, and without touching at any other place; and must in proceeding thither bring to at stations appointed by the commissioners for boarding by officers; and after arrival she must not remove except directly a some other proper place, and with the knowledge of the proper officer, on penalty of £100 by the master. The commissioners may appoint proper places for the mooring or unlading of ships inporting tobacco, and where such ships only shall be moored or unladen; and in case the place is on appoint do be not within some dock surrounded with walls, if any ship, after having been displaced by the surrounded with walls, if any ship, after having been displaced by the surrounded with walls, if any ship, after having been displaced by the surrounded with walls, if any ship, after having been displaced by the surrounded with walls, if any ship, after having been displaced.

fig. and remain on board until all the goods have been duly delivered; and such officers must have free access to every part of the ship, with power to fisten down hatchways, and to mark any goods before landing, and to lock up, seal, mark, or otherwise secure any goods on board; and if any place, or any box or chest, be locked, and the keys be withheld, such officers, if they be of a degree superior to tidesmen or watermen, may open them in the best manner in their power; and if they be tidesmen or watermen, or only of that degree, they must send for their superior, who may so open them. If goods be found concaled, they become forfeited; and if the officers place any lock, mark, or seal upon any goods on board, and they are wilfully opened, altered, or broken before due delivery, or if any of the goods he secretly conveyed away, or if the hatchways, after having been fastened down by the officer, be opened, the master forfeits £100.

§ 18. When government ships, British or foreign, have goods on board, the commanding officer must, before unloading, or when called on by an officer, deliver an account of quality and quantity, marks and numbers, and names of shippers and the territory of the goods. He master forfeits £100.

§ 18. When government ships, British or foreign, have goods on board, the commanding officer must, before unloading, or when called on by an officer, deliver an account of quality and quantity, marks and numbers, and names of shippers and consignees, and subscribe declaration, and answer questions, acc, as above, under penalty of £100. Such ships are liable to such searches as merchinal ships, and officers may enter them, and bring on shore into the Queen's warehouse goods found on board at the time of clearing from the United Knigdom, and of the green of the control of the first ships of water and the state of the collector or comprising a subscribe declaration, and of every seaman who has described to the number, measure, or weight, such number, measure, or weight to the collector for the in

Every master omitting forents £50. The list is kept by the collector for the inspection of all interested.

Entry, § 17. Every importer must, within fourteen days after arrival, make perfect entry inwards, or entry by bill of sight, of the imported goods, and land the goods; and in default, officers may convey them to the Queen's warehouse, with the exception only of a small quantity, the officers may convey such remaining goods, and may at any time convey small packages or parcels to the warehouse, although the fourteen days have not expired, to be kept waiting due entry during their remainder. If the duties on goods so conveyed to the Queen's warehouse be not paid within 3 months after the 14 days, with charges of removal and rent, they must be sold, and the produce applied, first to the payment of freight and charges, next of duties; the overplus, if any, going to the proprietor.

§ 18. The person entering goods inwards (whether for payment of duty, or to be warehoused upon the first perfect entry, or for payment of duty upon the goods being taken out of the warehouse, or whether such goods be free of duty, must deliver to the collector or comptroller a bill of entry, fairly written [or by 1 & 2 Vict. 2. 113, § 3, printed or partly written and partly printed] in words at length, expressing the name of the ship, and of the master, and of the place whence the goods were brought, and the description and situation of the warehoused, and the number and denomination of the

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§ 22. If it appear to the officers that goods are not valued according to their true value, they may detain and secure them, and (within 5 days from the landing, if in the ports of London, Leith, or Dublin, or within 7 days if in any other port), take them for the use of the crown; and if a different rate be charged, according as the value of the goods is described as above or below any particular price, and they are valued in the entry for the lower rate, and it appear to the officers that they are liable to the higher rate, they may be so taken. The commissioners, in such cases, cause the amount of such valuation, together with an addition of 10 per cent., and the duties paid upon entry, to be paid to the importer or proprietor in full satisfaction, and dispose of the goods for the benefit of the crown; and if the produce exceed the sums and charges, one moisty of the overplus goes to the officer who detained the goods; and the remainder is carried to account as duties of customs.
§ 23. The value of goods imported by the East

carried to account as duties of customs.
§ 23. The value of goods imported by the East
India Company is ascertained by the gross price
which they bring at the Company's sales, and the
Company is required to sell all goods paying duty
by their value, within three years from the importation, and give notice to the officers of the
time and place.
§ 24. If the importer, or his agent after full con-

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ference with him, declare before the collector or comptroller that he cannot, for want of full information, make a full or perfect entry, and subscribe a declaration to the truth thereof, the collector and comptroller may receive an entry by bill of sight for the parcels of such goods, by the lest description which can be given, and may grant warrant that they may be provisionally landed, and be examined by the importer, in p esence of the proper officers; and within three duys after goods have been so landed, the importer must make a full or perfect entry, and either pay all duties or duly warehouse the goods, according to the purport of the full or perfect entry. When perfect entry is made of goods so provisionally landed, the regulations of \$20 apply. If money have been deposited upon any entry by bill of sight, on account of the duties which may be found to be payable, the officers may deliver, in virtue of the warrant for landing the same, any quantity of goods the duty on which does not exceed the sum.

§ 28. In default of perfect entry within 3 days, the context was the stem to the Queen's ware.

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which does not exceed the sum.

§ 25. In default of perfect entry within 3 days,
the goods may be taken to the Queen's warehouse; and if the importer do not, within one
month after landing, make perfect entry, and
pay the duties on such parts as can be entered
for home use, together with charges of removal
and of warehouse rent, the goods must be sold for
payment of duties (or for exportation, if they be
such as cannot be entered for home use, or be
not worth the duties and charges), and for payment of charges; the overplus, if any, being
paid to the importer or proprietor.

ment of charges; the overplus, it any, being paid to the importer or proprietor.
§ 26. The East India Company may, without proof, enter by bill of sight, to be landed and secured as the commissioners may require, goods imported by them, or by any other person from within the limits of their charter—with the convent within the limits of their charter—with the consent of such person, upon condition to cause perfect entry to be made within 3 months from date of importation, either to warehouse the same or to pay the duties as follows, viz.: if the goods be charged duty according to the value, to pay within 4 months from the sale; and if according to the number, measure, or weight, to pay one molety within 6, and the other within 12 calendar months from the time of importation; the goods to be secured as the commissioners may require. months from the time of importation; the goods to be secured as the commissioners may require, until duly entered, and the duties paid, or until duly exported. Any person importing goods from the Company's territory into the port of London, may enter them in his own name, on giving security by bond, to the satisfaction of the commissioners, on the like conditions, provided the goods be entered in some warehouse under the superintendence of the Company.

§ 27. In case of any default in the above regulations, as to due entry and payment of duty, the commissioners may cause the goods to be sold for payment of duties (or for exportation, if they be such as cannot be entered for home use), and for payment of charges, the overplus, if any, being

such as cannot be entered or nome usel, and for payment of charges, the overplus, if any, being paid to the proprietor.
§ 28. When goods are found frauduently concealed in packages landed by bill of sight, the whole contents of the packages are for-

they were landed, and provided the claim be made at the time of the first examination.

§ 31. On the claim being so made, the officers examine the goods, and may state the proportion of damage, according to their opinion, and make a proportionate shatement; but if the officers be incompetent to estimate the damage, or the importer be not satisfied, the collector and comporter be not satisfied, the collector and comporter be not satisfied, the collector and comporter be not satisfied, the collector and composite to examine them, who indifferent merchants experienced in the nature and value of such goods, to examine them, who subscribe a declaration, stating in what proportion they judge them lessened in value, and the officers may make abatement accordingly.

§ 32. No abstement is to be made for damage to any of the following goods, vis.:—Cooos, coffee,

any of the following goods, vis.:—Occoa, coffee, oranges, pepper, currants, raisins, figs, tobacco, lemons, and wine [and by 4 & 5 Wm. IV. c. 89, 5, certain drugs are added to the list, viz.:—cantharides, cocculus Iudicus, Guines grains, jalent longer and the contraction of the

lap, ipecacuanha, nux vomica, opium, rhubarb, saraparilla, and senna].
§ 33. It is lawful to reimport in a ship of any sarraparilia, and senna].

Sal. It is lawful to reimport in a ship of any country, goods (with the exceptions after stated) which have been legally exported, and to enter them by bill of store, referring to the entry outwards, and exportation, provided the property continue in the person by whom, or on whose account they were exported, and that the reimportation take place within 6 years from the date of exportation. [By 6 & 7 Wm. IV. c. 49, § 2, this provision is so far altered, that if the proprietor be absent, the goods may be entered by bill of store, on production of a declaration by him of their identity and of their not having been sold, made before the consul or other British authority, at his place of residence]; and if the goods so returned be foreign, which had before been legally imported, the same duties are payable as would, at the time of reimportation, he payable on the like goods, under the same circumstances of importation, as those under which such goods had been originally imported, or such goods might be warehoused as the like goods might be warehoused upon a first importation. Provided that the goods enumerated in the table following cannot be reimported for home use upon the ground that they had been legally exported, but are deemed foreign goods, whether originally such or not, and deemed to be imported for the first time into the United Kingdom:

A Table of Goods Exported May Nor

A TABLE OF GOODS EXPORTED WHICH MAY NOT BE REIMPORTED FOR HOME USE.
Corn, grain, meal, flour and malt, hops, to-bacco, tea.
Goods for which any bounty or drawback of

loods for which any bounty or drawback of Excise had been received on exportation, un-less by special permission of the commissioners, and on repayment of the bounty or drawback. All goods for which bill of store cannot be issued, as hereafter explained, except small remnants of British goods, by special permis-sion of the commissioners, upon proof to their satisfaction that they are British, and had not been sold.

§ 34. The person in whose name goods so the whole contents of the packages are forfeited.

§ 29. The East India Company are to pay the
customs duties incurred by them at the respective
times when they become due, and obtain from
the receiver-general a receipt, which must be
taken by the collector as cash.

§ 30. If goods rated to pay duty according to
number, measure, or weight (with exceptions)
after mentioned), receive damage during the
toyage, an abatement of duties is allowed in
the proportion to the damage, provided proof be
made to the satisfaction of the commissioners,
or of the proper officers, that the damage was
received after the goods were shipped, and before

due clearance of the ship, containing an account of such goods.
§ 37. Before sugar, coffee, cocos, or spirits are entered as the produce of some British Possession in America, or the Mauritius, the master must deliver to the collector or comptroller a certificate, under the hand of the proper officer where such goods were taken on board, testifying that proof had been made as required by law, that the goods are of such produce, stating place of produce, quantity and quality, number and denomination of the packages, and name of ship and master; and the master must also subscribe a declaration before the collector or comptroller, that anch cere

and the master must also subscribe a declaration before the collector or comptroller, that such certificate was received by him at the place of taking on board, and that the goods are the same as are mentioned therein.

§ 33. Before sugar is entered as the produce of any British Possession within the East India Company's charter, the master must deliver to the collector or comptroller a certificate under the hand and seal of the proper officer at the place of taking on board, testifying that eath had been made before him by the shipper, that the same was really and bona fide such produce; and the master must also subscribe a declaration before the collector or comptroller, that such certificate was really and contained sheer produce; and the master must also subscribe a declaration before the collector or comptroller, that such certificate was received by him at the place of taking on board, and that the sugar is the same as is mentioned therein. [By 5 & 6 Wm. IV. c. 66, § 2, no coffice can be entered as such produce, unless the master deliver to the collector or comptroller a certificate under the hand and seal of the proper officer at the place of taking on board, stating that a declaration had been signed before him (the contents of which he examined, and believed to be true) by the shipper, to the effect that the coffice was really the produce of such British Possession; nor unless the master subscribe a declaration, that the certificate was received by him at the place of taking on board, and that the coffice imported is the same as therein mentioned.]

coffee imported is the same as which in the distributed.]
§ 39. Before any wine is entered as the produce of the Cape of Good Hope, the master must delive to the collector or comptroller a certificate under the hand of the proper officer, testifying

he must subscribe a declaration on the bill of store of the name of the person for whose use the goods have been consigned to him; and the real group relator, ascertained to be such, must subscribe a declaration on the bill of store to the identity of the goods so exported and so returned, and that he was at the time of exportation and of reimportation the proprietor, and that the goods had not during such time been sold or disposed of to any other person; the declaration be made before the collectors or comptrollers at the ports of exportation and importation respectively; whereupon the collector and comptroller shall admit such goods to entry by bill of store, and grant their warrant accordingly.

§ 36. Surplus stores are subject to the same duties, prohibitions, restrictions, and regulations, as the like sorts of goods when imported by way of merchandise; but if it appear to the collector and comptroller that the quantity or description of such stores is not excessive or unsuitable of such stores is not excessive or unsuitable to be indeed the proper duties, or to be warehoused for the such goods were taken on board, of the proper duties, or to be warehoused for the duce clearance of the ship, containing an account of such goods and be entered as being from a during the produce of the packages; while the collector or comptroller a ce

except manufactures of lines and cotton made in and imported from the laie of Man.

§41. Before goods can be entered as the produce of these islands (if any benefit attach to such distinction), the master delivers to the collector or comptroller a certificate from the governor or commander, that proof had been made, as required by law, that the goods were of the produce of the laland, stating the quantity and quality, and the number and denomination of the peckages; while the master must subscribe a declaration that the certificate was received at the place of taking on board, and that the goods are the same as are mentioned therein.

§42. The Treasury may permit goods, the pro-

certificate was received at the place of taking on a board, and that the goods are the same as are mentioned therein.

§ 42. The Treasury may permit goods, the produce of the British Possessions or Fisheries in North America, imported into Guernsey or Jersey direct, to be imported into Guernsey or Jersey direct, to be imported into the United Kingdom for home use direct from those islands, under such regulations as may be directed.

§ 43. No vessel arriving on the coast of England from the Channel Islands or Man, wholly laden with stone, the production thereof, is liable to be piloted by pilots licensed by the Trinity House.

§ 44. Freah fish of British taking, and imported in British ships, and fresh lobsters and turbots, however taken or in whatever ship, and cured fish of British taking and curing, imported in British ships, may be imported duty free; but before cured fish can be so entered fier of duty, the master must subscribe a declaration before the collector or comptroller, that such fish was actually caught and taken in British ships, and cured by the crews of such ships, or by British subjects.

§ 45. Before blubber, train oil, spermaceti oil, head matter, or whale fins, are entered as the produce of see animals caught wholly by her Majesty's subjects usually residing in some part of her Majesty's dominions, and imported from some British content of the British Possession, or if no such officer be there, of two principal inhabitants at the place of shipment, inotifying that oath had been made by the shipper, that the goods were the produce of sea animals taken wholly by British vessels. The master must also subscribe a declaration before the collector or comptroller, that the certificate was received by him at the place of taking on board, and that the goods are the same as mentioned therein; and the time of entry, that, to the best of his knowledge and belief, the same wore the produce of sea animals taken wholly by British vessels.

\$46. Before blubber, train oil, spermaccti oil, head matter, or whale fins, imported direct from the fishery, are entered as the produce of sea animals caught whoily by the crews of ships cleared out from the United Kingdom, or from the Channel Island or Man, the master must subscribe a declaration, along with the importer (to the best of his knowledge and belief), that the same are the produce, and caught, &c. as above; if the ship has cleared out from any of the Islands, specifying which.

§ 47. Upon the return of any ship from Greenland or Davis' Straits to the United Kingdom with binbber, the importers may cause it to be boiled at the port of importation, under the inspection of the officers; and the oil produced may be admitted to entry, and the duties be paid, as if so imported, and the oil, if afterwards are ported, is not subject to duty of exportation as a manufacture of the United Kingdom for a manufacture of the United Kingdom for many particular place unless they be imported direct, and have been laden on board the imported from any particular place unless they be imported direct, and have been laden on board the imported from any beam in such particular place unless they be imported direct, and have been laden on board the imported from any beam actually landed.

§ 49. With regard to the sale of goods, duty-free, for salvage, is repealed by 4 & 5 Wm. IV. 189. § 4.

§ 50. All foreign goods, derelict, jetaum, flot-sam, and wreck, brought or coming into the United Kingdom or the late of Man, are subject to the same duties as goods of the like kind imported; and if any question arise as to the origin of such goods, they are to be deemed of the growth, produce, or manufacture of such piace, and in the subject for such goods, they are to be deemed of the growth, produce, or manufacture of such piace, and are deemed unenumerated. This is repealed by 6 & 7 Wm. IV. 180. § 5. Which provides that the first shipment of the commissioners and the output of the commissioner of the late of the commissioner of the \$ 49. With regard to the sale of goods, duty-free, for salvage, is repealed by 4 & 5 Wm. IV. c. 89, \$ 4.
\$ 50. All foreign goods, derelict, jetsam, flot-sam, and wreck, brought or coming into the United Kingdom or the lale of Man, are subject to the same duties as goods of the like kind imported; and if any question arise as to the origin of such goods, they are to be deemed of the growth, produce, or manufacture of such place as the commissioners may upon investigation determine: Moreover, if any such goods be of such sorts as are entitled to allowance for damage, the surface of the such as the commissioners are entitled to allowance for damage, the surface of the surface

the established standard in weight or fineness. Fish of foreign taking or curing, or in foreign vessels; except turbots and lobsters, stock flab, live cels, anchovies, sturgeon, botargo, and caviare. [Sait or dried flash may be imported for warehousing, I st a "Net. c. 11.8, § 7.1 Gunpow Garehousing, I st a "Net. c. List of Goods subject to certain Restrictions on Importation.

China—goods from, unless by the East India Company, and into the port of London, during it be continuance of their exclusive privileges flow expired]. East India—goods of places within the limits of the East India—goods of places within the limits of the East India—goods of places within the limits of the East India—goods of places within the limits of the East India—goods of places within the limits of the East India—goods of places within the limits of the East India—goods of places within the limits of the East India—goods of places within the limits of the East India Company's charter, unless in ships of 70 tons [or, by 6 & 7Wm. IV. c. 60, § 5, if measured by the new measurement act, 60 tons] or upwards, and in packages containing 100 dozen pairs of such gloves. Hides, skins, horns, or hoofs, or any other part of cattle or beast, her Majesty may by order in council prohibit, in order to prevent any contagious distemper. Parts of articles, viz. any distinct or separate part of any article not accompanied by the other part or all the other parts of such article, so as to be complets and perfect, if such article be subject to duty according to the value article be subject to duty according to the value thereof. Slik: manufactures of slik, being the manufactures of Europe, unless into the port of Dover direct from Boulogue], and unless in a ship or vessel of tondon, or into the port of Dover direct from Boulogue], and unless in a ship or vessel of the burden of 60 tons by the new measurement] or upwards, or into the port of Dover in a vessel of the burden of 60 tons by the new measurement] or upwards, viz. all spirits, unless in ships of 70 tons [or of 60 tons by the new measurement] or upwards; viz. all spirits, unless in ships of 70 tons for of 60 tons by the new measurement] or upwards; viz. all spirits, unless in hips of 70 tons for of 60 tons by the new measurement] or upwards; viz. all spirits, viz. all spirits, viz. all spirits, viz. all spir

that they are entered to be warehoused for exportation only.

OUTWARDS.

General Provisions, § 61. No goods can be shipped, or waterborne to be shipped, in any place in the United Kingdom, or the Isle of Man, to be carried to parts beyond the seas, before due entry outwards of ship and entry of goods have been made, and cocket granted, nor before the goods have been duly cleared for shipment as after mentioned; and no stores can be shipped for the use of such ship, nor can goods be deemed stores, except such as are borne upon the victualling bill, and no goods can be so shipped or waterborne to be shipped, except as directed by the act, under penalty of forfeiture of the goods or stores.

§ 62. The master of any ship with goods or stores.

§ 63. The master of any ship with goods or stores on board departing without being duly cleared outwards, forfeits £100.

§ 63. The master of every ship departing upon application receives from the searcher a victualling bill for the shipment of such stores as he may require, and as may be allowed by the

collector and comptroller, for the use of the ship, according to the voyage, and no articles are deemed stores except such as are so borne upon

the victualing bill.

Ship's Bhiry, § 64. The master of every ship in which goods are to be exported, must, before taking on board, deliver to the collector or compitating on board, deliver to the collector or compitating on board, deliver to the collector or compitating on the such ship of her hast voyage, specifying what goods, if any, have been reported inwards for exportation; and an account, signed by the master or his agent, of the entry outwards of the ship for her intended voyage, setting forth the name and tomasce, the name of the place to which she belongs if a British ship, or of the country if a foreign ship, the name of the master, and the name of the place at which he is to take in her lading, and if the ship have commenced her lading, and if the ship have commenced her lading, and if the ship have commenced her lading, and if the port at which any goods have been so laden, and produce a certificate from the scurcher that the cockets for such goods have been so laden, and produce a certificate from the scurcher that the cockets for such goods have been so laden, and produce a certificate from the scurcher that the cockets for such goods have been so laden, and produce a certificate from the scurcher that the cockets for such goods have been so laden, and produce a certificate from the scurcher that the cockets for such goods have been so laden, and produce a certificate from the scurcher that the cockets for such goods have been so laden, and produce a certificate of the account to be written and arranged as the collector and comptroller may require. The secount is the entry outwards, the master forfeits £100; but where it becomes necessary to lade any heavy goods before the whole of the inward cargo is discharged, the collector or comptroller ability of entry fairly written [or printed as above, see § 18], in words at length, expressing the name of the ship and of the master, and of the place to which the goods are to be exported, and of the person in whose name thus are to be entered, and the qu

\$ 67. If upon examination it appear to the officers that the goods are not valued according to the true value, they may be detained, and (within two days) taken and disposed of for the benefit of the crown, as above provided with regard to goods imported, except that ne sum in addition to the amount of the valuation and the duties goods imported, except that ne sum in addition to the amount of the valuation and the duties paid is to be paid to the exporter or proprietor.

§ 68. The person intending to enter outwards any foreign goods for drawback, at any other port than that at which the duties inwards had been paid, must first deliver to the collector or comptroller where the duties were paid two er more bills, as the case may require, of the particulars of the himportation, and of the entry outwards intended to be made; and thereupon the collector and comptroller, finding such bills to agree with the entry inwards, writes off such goods from the same, and issues a certificate of the entry, with such particulars as may be necessary for the computation of the drawback, setting forth the destination of the goods, the person in whose name they are to be entered, and the name of his port. The certificate, with two or more bills of the same, as the case may require, in which sums and numbers may be expressed in figures, being delivered to the collector or comptroller of the port of exportation, is the entry outwards, and such collector and comptroller causes a cocket to be written and delivered as above stated.

§ 69. No cocket can be granted for coals to the lase of Man, or any British Possession, until the exporter give security by bond in a penal sum of forty shillings the chaldron, with condition that the same shall be landed at the place for which they are exported, or otherwise accounted for to the attick. The bond is not liable to stamp duty.

**Clearance of Goods, § 70. Before any part of the goods for which a cocket has been granted; and before being cleared, the particulars for each into the same shall be

outwards.
§ 73. Upon the clearance of goods of home pre

duce or manufacture not liable to export duty, an account, containing an accurate specification of quantity, quality, and value, together with a declaration to the truth, signed by the exporter or she known agent, must be delivered to the searcher by the person clearing; and if the declaration be false, the person signing forfeits £90. The searcher may call for the invoice, bills of parcels, and such other documents relating to the goods as he may think necessary for ascertaining their true value. It is provided, that if the exporter or agent subscribe a declaration before the collector or comptroller that the value cannot be ascertained in time for the shipping bill before the penalty is incurred.

§ 74. No drawback of excise is allowed on goods to cleared, unless the person intending to claim have given notice to the officer of excise, on taking the necessary description of the goods; and if the goods upon examination be found to correspond in all respects with the parcels and produced to the searcher at the time of clearing a proper document from the officer of excise, containing the necessary description of the goods; and if the goods upon examination be found to correspond in all respects with the parcels and produced to the searcher at the time of clearing a proper document from the officer of excise, containing the necessary description of the goods; and if the goods upon examination be found to correspond in all respects with the parcels and produced to the searcher at the time of clearing a proper document from the officer of excise, containing the necessary description of the goods; and if the goods upon examination be found to correspond in all respects with the parcels and produced to the searcher at the time of clearing a proper document from the officer of excise, on the proper document of the provided the particular contained in the document, and such goods and attribute of the searcher with the searcher with the searcher thanks and produced to the searcher shall, if the proper document upon the

packages, and keep joint charge of the getter with the searcher, until they have been finally delivered into the sole charge of the searcher to be shipped and exported under in respect of exportation, or any goods to be shipped for any drawback or bounty, are brought to any quay, wharf, &c. to be shipped for exportation, and do not agree with the indonement on the cocket, or with the shipping bill, they are forfeited; and if goods prohibited to be exported be found in any package so brought, it and its contents are forfeited.

§ 77. The searcher may open all packages, and examine their contents, which, if found to correspond with the cocket and clearance, he must repack, at his own charge, to be allowed by the commissioners as they see fit.

Clearance of Ship, § 78. Before any ship is cleared outwards with goods shipped on board, the master must deliver a content of the ship to the searcher, setting forth name and tonage, place of destination, and name of master, and also an account of the goods and packages, and of the marks and numbers thereon, and a like account of the goods on board, if any, which had been reported inwards for exportation, so far as any of such particulars can be known by him; and also before clearance, the cockets, with the indorsements and clearances for the goods shipped, must be finally delivered by the shippers to the exercher, who files them together, and attacks with a seal a label to the file, and compares the particulars in the content, and attacks with a seal a label to the file, and compares the particulars in the content, and attacks with a seal a label to the file, and compares the particulars in the content, and attacks with the particulars in the content, and answer such goods in bealf of himself and crew, and to to fire greater value than in the proportion of £30 for the master must clear the correctness by his signature on the label to the file, and the clearance in notified by the collector or comptroller must clear the ship for her voyage, as may be demanded; whereany the

coast, and demand the file of cockets and the victualling bill, and if there be goods or stores are contained in the indorsements on the cockets one in the victualling bill, they are forfeited; and if goods contained in the indorsements be not on board, the master forfeits £30 for each package; and if any cocket be at any time faisified, the person faisifying or withully using it forfeits £100.

§ 83. Every alip departing from any port must bring to at such stations within the port as may be appointed by the commissioners, for the landing of officers, or for further examination.

Debeaters Goods, § 83. No drawback or bounty is allowed upon exportations unless the goods have been entered in the name of the real owner at the time of entry and shipping, or of the person who had actually purchased and shipped them, in his own name and at his own liability and risk, on commission, according to the practice of merchants, and who continues to be entitled in his own right to such drawback or bounty, except in the cases after provided for.

§ 87. The owner or commission merchant must subscribe a declaration upon the debenture that the goods have been actually exported, and have not been relanded, and are not intended to be relanded in any part of the United Kingdom nor in the Isle of Man1, nor in the Farce Isles, and that he was the real owner at the time of entry and shipping, or that he had purchased and shipped the goods in

in the Isle of Man (unless entered for the Isle of Man), nor in the Farce Isles, and that he was the real owner at the time of entry and shipping, or that he had purchased and shipped the goods in his own name and at his own liability, on commission, as the case may be, and that he was and continued to be entitled to the drawback in his own right, provided that if he have not purchased the right to the drawback or bounty, he must declare under his hand upon the entry and the debenture the person entitled to it, whose name must be stated in the cocket and in the debendure, and the receipt of such person on the debenture is a discharge for the drawback.

§ 28. If the owner or merchant be resident more than 20 miles from the custom-house of the port of shipment, he may appoint any person to be his agent to make and pass his entry, and to receive the drawback or bounty payable on his debenture, if payable to him, provided the name of the agent and the residence of the owner or merchant be subjoined to the name of the owner or merchant in the entry and in the cocket. The agent must

subjoined to the name of the owner or merchant in the entry and in the cocket. The agent must make declaration upon the entry, if any be necessary, and also upon the debenture, to the effect above described, and must answer such questions touching his knowledge of the exportation of the goods, and the property therein, and of the right to the drawback or bounty, as may be demanded by the collector or comptroller; and if such goods be exported by a corporation or joint-stock company, they may appoint an agent so to act for them.

8.80. If any goods to be exported for drawback

joint-stock company, they may appoint an agent as to act for them.
§ 89. If any goods to be exported for drawback have been consigned by the owner to his agent to be exported on account of the owner, the agent being the consignes by whom and in whose name the duties inwards on such goods had been paid, or his legal representative, may in like manner enter, clear, and ship the goods for him, and receive the drawback.
§ 50. No drawback is allowed on exportation of goods unless they be shipped within 3 years after payment of duties inwards, and no debenture for any drawback or bounty allowed upon exportation is paid after 2 years from the date of shipment, nor is any drawback allowed upon goods which by damage or decay have become of iees value for home use than the drawback; and goods so damaged if cleared for drawback are forfeited, and the person clearing forfeits £300, or treble the drawback, at the election of the commissioners.

§ 91. For the purpose of computing and paying any drawback or bounty, a debenture must, in due time after entry, be prepared by the collector and comprtoller, certifying in the first instance the entry outwards; and so soon as the goods have been duly exported, and a notice of the particulars of them has been delivered by the exporter to the searcher, the shipment and exportation must be certified to the collector and comptroller upon the debenture, by the searcher, and the debenture is then computed and passed with all convenient despatch, and delivered to the person entitled to receive it.

§ 92. No drawback or bounty is allowed for goods exported to the laie of Man until a certificate be produced from the collector and comptroller there of the due landing.

§ 93. No drawback or bounty is allowed for bales cleared as press-packed, unless the quantities and qualities of goods in each be verified by the master packer, or, in case of unavoidable absence, by his foreman, having knowledge of the contents after the collector or comptroller; or if the packer reside more than ten miles from the port, by declaration subscribed upon the collector or comptroller; or if the packer reside more than ten miles from the port, by declaration upon an account of the goods, before a magistrate or justice. If such bales be not cleared as being press-packed, the searcher, having opened any bale, is not required to repack it at his charge.

§ 94. No goods cleared for drawback or bounty, or from the warehouse, can be waterborne, to be put on board, unless by a person authorised by license from the commissioners, who, before granting it, may require such security as they may deem necessary. The commissioners may revoke any such license if the holder be convicted of any offence against the laws of the customs or excise.

§ 94. If any goods taken from the warehouse to be exported, or cleared to be exported for any drawback or bounty, are not duly exported to

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in wy teem necessry. The commissioners may revoke any such license if the holder be convicted to fany offence against the laws of the customs or excisa.

§ 28. If any goods taken from the warehouse to be exported, or cleared to be exported for any strategy of the conviction of the conviction of the conviction of the proper officers), or be handed in the Farce Like, or be carried to the financial listends, or Man (not having been duly eleaned or discharged as short-shipped under the care of the proper officers), or be handed in the Farce Like, or be carried to the financial Islands, or Man (not having been duly entered, cleared, and shipped to be exported to get the convention of the first and second rate, 630; captain of the third, fourth, and fifth rate, 430; captain of the first and second rate, 630; captain of an inferior rate, 210; lieutenant and other commission of the first and second rate, 630; captain of an inferior rate, 210; lieutenant and other commission of an inferior rate, 210; lieutenant and other commission of an inferior rate, 210; lieutenant and other commissions, which is also the commission of an inferior rate, 210; lieutenant and other commissions, and of the commission, and for weary marine officer, 106. Such wine can only be shipped at one of the following ports, vis. —London, Rochester, Deal, Dover, Portsmouth, Plymouth, Yarmouth, Falmouth, Balfast, Dublin, Oork, Leith, or Glasgow.

§ 97. The person entering such wine, and claiming the drawback, must state in the entry and declare on the deblorator, the name of the officer, and of his ship; and the wine must be delivered into the charge of the officer of th

§ 98. Provision is made for transferring wine from one officer to another, as part of his pro-

portion, whether on board the same ship or ansteer, or the transshipment from one ship to another for the same officer, or the relanding and warehousing for future reshipment. The officers of customs may receive back the duties for any of such wine, and deliver it for home use: Provided, that if any such wine be not laden on board the ship for which it was intended, or be uniaden without permission of the proper officer of the customs, it is forfeited.

§ 99. The purser of any ship of war in actual service may enter and ship at the ports of Rochester, Portsmouth, or Plymouth, tobacco there standing warehoused in his name, for the use of his ship, provided he deliver to the collector or comptroller a certificate from the captain, stating the name of the purser and the number of men, and give bond, with one surety, in treble the duties, that no part shall be relanded without leave of the officers of the customs, or be landed in the Channel Islands, or Man.

§ 100. If any purser be removed to another ship, the remainder of any tobacco may be transshipped, upon due entry, setting forth the time and the port of the first shipment. The collector and comptroller of a port where any ship is paid off may permit the remains of any tobacco to the instantian of any tobacco and comptroller of the previous of the act for payment of duties. All tobacco so warehoused is subject to the provisions of the act for the warehousing of tobacco generally, as far as applicable.

the warehousing of tobacco generally, as mr as applicable.
§ 101. No greater quantity of tobacco is allowed to any ship than 3 lbs., by the lunar month, for each of the crew, nor may a greater quantity be shipped at one time than sufficient to serve for aix months; and the collector and comptroller have to transmit an account of the quantities to the commissionars.

ie commissioners.
§ 102. Goods may not be put off from any wharf, § 102. Goods may not be put off from any wharf, quay, &c., or be waterborne for exportation, except only on days not being Sundays or holidays, and in the daytime, viz.: from 1st September to the last day of March, betwits sunrising and sunsetting, and from the last day of March until the 1st September, between 7 o'clock & M. and 4 o'clock r. M.; nor may goods be then put off or waterborne, unless in the presence or with the authority of the proper officer, nor except from a legal quay appointed by royal authority, or some wharf, quay, or place appointed by the commissioners.

§ 103. Any person exporting goods prohibited

5 103. Any person exporting goods prohibited from being exported under penalty of forfeiture, forfeits double their value.

Prohibitions, § 104. The goods in the table following are either absolutely prohibited to be exported, or must be exported under the restrictions in the table, viz.:—

A TABLE OF PROHIBITIONS AND RESTRICTIONS

Clocks and watches, viz.: Any outward or in-ward box, case, or dial-plate, of any metal, without the movement in or with every such box, case, or dial-plate, made up fit for use, with the clock or watchmaker's name engraven

thereon.

Lace, viz.: Any metal inferior to silver which shall be spun, mixed, wrought, or set upon silk, or which shall be gilt, or drawn into wire, or fiated into plate, and spun or woven, or wrought into or upon, or mixed with lace, fringe, cord, embroidery, tambour-work, or buttons, made in the gold or silver lace manufactory, or set upon silk, or made into bullion spangles, or pearl or any other materials made in the gold or silver lace manufactory, or which shall initiate or be meant to initiate such lace, fringe, cord, embroidery, tambour-work, or

buttons; nor shall any person export any copper, brass, or other metal which shall be silver-ed or drawn into wire, or flatted into plate, or made into bullion spangles, or pearl or any other materials used in the gold or silver lace manufactory, or in imitation of such lace, fringe, cord, embroidery, tambour-work, or buttons, or of any of the materials used in making the same, and which shall hold more or bear a greater proportion than three penny-weights of fine silver to the pound avoirdupois of such coppers brass, or other metals. Any metal inferior to silver, whether gilt, silvered, stained, or coloured, or otherwise, which shall be worked up or mixed with gold or silver in any manufacture of lace, fringe, cord, embroidery, tambour-work, or buttons. Tools and utensils, viz.: Any machine, engine, tool, press, paper, utensil, or instrument used in or proper for the preparing, working, pressing, or flitishing of the woollen, cotton, linen, or silk is used, or any part of such machines, engines, tools, presses, paper, utensils, or instruments; or any model or plan thereof, or any part thereof; except wool cards or stock cards not worth above four shillings per pair, and spinners' cards not worth above one shilling and skapene per pair, need in the woollen manufactures. Blocks, plates, engines, tools,

any part thereof; except wool cards or stock cards not worth above four shillings per pair, and spinners' cards not worth above one shilling and sixpence per pair, used in the woolken manufactures. Blocks, plates, engines, tools, or utensils, commonly used in or proper for the preparing, workingup, or finishing of the calloo, cotton, muslin, or linen printing manufactures, or any part of such blocks, plates, engines, tools, or utensils. Rollers, either plain, growed, or of any other form or denomination, of cassiron, wrought from, or steel, for the rolling of fron or sny sort of metals, and frames, beds, pillars, screws, pinions, and each and every implement, tool, or utensil thereunto belonging; rollers, slitters, frames, beds, pillars, and screws for slitting mills; presses of all sorts, in fron and steel, or other metals, which are used with a screw exceeding one inch and a half in fron and steel, or other metals, which are used with a screw exceeding one inch and a half in fron and steel, or other metals, which are used with a screw exceeding one inch and a half in fron and steel, or other metals, which are used with a screw exceeding one inch and a half in fron any part thereof; all sorts of utensils, or any part thereof, all sorts of utensils, engines, or machines used in the casting or boring, or any models of tools, utensils, engines, or machines used in such casting or boring, or any parts thereof; hand-stamps, dog-head stamps, pulley-stamps, hammers and anvils for stamps; presses of all sorts called cutting-out presses; beds or punches to be used therewith, other in parts or pieces, or fitted together; scouring or shading engines; presses for horn buttons; dies for horn buttons; of its for horn buttons; of its for horn buttons is used in the rough state or finished for use; whre moulds stones commonly called blood-stones, either in the rough state or finished for use; whre moulds for making paper; wheels of metal, stone, or wood, for cutting, roughing, smoothing, polishing, or engraving glass; purceli

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Formerly no goods or passengers were permitted to be carried coastwise, from one part of the United Kingdom to another, but by British Ships; but Foreign ships are now permitted to be employed in the coasting-trade, applied to the same rates and results. subject to the same rules and regulations, and paying the same charges as British ships. 16 & 17 Vict. cap. 107, and 18 & 19 Vict. cap. 96 define the regulations. Most of the following provisions still hold good under the existing

§ 151 All trade by sea from one part of the United Kingdom to another, or from one part of the Isle of Man to another, is deemed coasting-

§ 151 All trade by sea from one part of the Inted Kingdom to another, is deemed coarting-trade, and all ships employed therein coasting-ships; and no part of the United Kingdom, however situated, is deemed beyond the seas, with regard to any other part.

The Treasury are empowered to determine in what cases the trade by water from one place on the coast to another shall or shall not be deemed a trade by sea, within the meaning of this act or any other act.

No goods are to be carried in any coasting-ship, except such as are laden at some place in the United Kingdom, or the Isle of Man; and no goods are to be laden to be carried coastwise until all goods brought in the ship from abroad have been unladen; and if any goods be taken into or put out of any coasting-ship at sea, or over the sea, or if any coasting-ship touch at any place over the sea, or deviate from her voyage, unless forced by unavoidable circumstances, or if the master of any coasting-ship which may touch at any place over the sea, or not expected incumstances, or if the master of any coasting-ship which may touch at any place over the sea, do not declare the same in writing, under his hand, to the collector or comptroller at the port where the ship afterwards first arrives, the master forfeits £200.

No goods are to be laden to be carried coastwise, nor having been brought coastwise to be unladen, until due notice in writing, signed by the master, have been given to the collector or comptroller, by the master, owner, wharfinger, or agent, of the intention to lade, or of the arrival, as the case may be, nor until proper documents have been granted, as after described, for the lading or unlading; and goods laden or unladen contrary to the directions of the act, as follows, are forfeited.

In the notice must be stated the name and nomage of the ship, the name of the port to

isiding or unisating; and goods isseen or unisation contrary to the directions of the act, as follows:

In the notice must be stated the name and tomage of the ship, the name of the port to which she belongs, the name of the port to which she belongs, the name of the master, owner which she has arrived, and the name or describe the notice to be signed by the master owner, wharfinger, or agent, and entered in a book to be kept by the collector, for the information of all interested. Every notice for unisating must be delivered within \$4 hours after arrival, under a penalty of £30 by the master; and in every notice for lading must be delivered within \$4 hours after arrival, under a penalty of £30 by the master; and in every notice for lading must be the delivered within \$4 hours after arrival, under a penalty of £30 by the master; and in every notice of lading must be stated the last voyage, and the transfer for the goods. If it he discharge of any goods brought in the ship, and of due clearance inwards.

§ 157 Upon the arrival of any coasting-ship in Britain from Ireland, or in Ireland from Britain, the master must, within \$4 hours, deliver the notice, signed by him, to the collector or compartoller, in which, if the ship have on board goods subject to export duty (other than and ad solorem duty), and of our disconsisting the state of the second that Britain goods or no there is british goods be laden, or whether the ship whether the ship whether arrival and the descriptions before mentioned, as the case and the second that Britain goods had goods subject to export duty (other and ad solorem duty), and of other prices of any goods on to fany of the descriptions before mentioned, as the case that the strip whether a book to be taken in or disconsisting the descriptions before mentioned, as the case of the accounts and returns the other, dated and signed by him, and noting the clearance of the seas, there must be subject to any out of the arrival of any consisting the produced with the notice as certificate of the

board, it must be so declared. The master mast answer any questions relating to the voyage, and if he fail in due time to deliver the notice, and truly to answer questions, he forfeits £100. When due notice has been given to the collector or comptroller at the port of lading of the intention to lade, he grants a general sufferance for the lading of goods (without specifying them), at the place therein expressed, which is authority for lading any goods, accept such as it may expressly except. But before a sufferance be granted for goods prohibited, or subject to any export duty other than an ad sulcress duty, the master or owner, or the shipper, must give bond, with one surety in treble the value, that the goods shall be landed at the port for which the sufferance is required, or be otherwise accounted for to the attisfaction of the commissioners.

counted for to the antisaction of the commissioners.

§ 155 The master of every coasting-ship must keep a cargo-book, stating the name of the ship, of the master, and of the port to which she belongs, and of the port to which she belongs, and of the port to which she belongs, and of the port of all goods taken on board, stating the descriptions of the packages, and the quantities and descriptions of the shippers and consignees, as far as known,—and at the port of discharge must be noted the respective days on which goods are delivered, and the respective times of departure and arrival. The master must produce the book for the inspection of the coast-mained, who is at liberty to make any note or remark therein. If the master fall correctly to keep the book, or to produce the same, or if there be found on board goods not entered, or noted as delivered, or if any goods entered as laden, or not noted as delivered, be not on board, the master forfeits £50, and if, upon examination at the port of lading, any package entered as containing foreign goods be found not to contain such, it is forfeited, with its contents; and if at the port of discharge any package be found to contain foreign goods not entered, they are forfeited.

§ 156 Before any coasting-ship departs, an ac-

the port of unemarge any paccage to around contain foreign goods not entered, they are forfeited.

§186 Before any coasting ship departs, an account, with a duplicate, fairly written, and signed by the master, must be delivered to the collector or comptroller, setting forth the particulars required to be entered in the cargo-book, of foreign goods, and goods subject to export duty (other than an ad suborem duty), and of corn, grain, meal, flour, or mait, laden on board, and generally, whether any other British goods or no other British goods be laden, or whether the ship be wholly laden with British goods not of any of the descriptions before mentioned, as the case may be. The collector or comptroller retains one of the accounts, and returns the other, dated and signed by him, and noting the clearance for the covage, and the transier for the goods. If it he

exceeding one year, for the lading of any goods | and that exportation is deemed to have had effect (except such as it may expressly except), and for the clearance and unlading, viz.:—For any ship regularly trading,—between places in the river Bevern eastward of the Holmes; or between places in the river Humber; or between places to be named in the transire, and carrying only manure, lime, chalk, stone, gravel, sand, or any earth, not being fullers' earth. The transire must be routly, which has been judicially decided to be written in the cargo book. It may at any time level on an erroneous construction of the law, served, notice being given to the master or courser, or to any of the crew on board, or being of payment. named in the transite, and carrying only manure, lime, chalk, stone, gravel, and, or any earth, not being inliers' earth. The transite must be written in the cargo book. It may at any time be revoked, notice being given to the master or owner, or to any of the crew on board, or being entered in the cargo book by an officer. [By 6 & 7 Wm. IV. c. 60, § 6, this provision is extended, and such transites may be granted by the commissioners, "under such regulations, and for such time as they may see fit."]

The coast-waiter, landing-waiter, and searcher, and any other officer, may, at any time board any coasting-ship, and strictly search her, and examine all goods on board, or being laden or unladen, and demand all documents which ought to be on board.

No goods going coastwise are to be unship.

ought to be on board.

Nogoods going coastwise are to be unshipped, shipped, or waterborne to be shipped, but on the days and within the times before mentionating 10½, and in presence or with the authority of, and at places appointed and approved of by, the proper officer.

When goods are prohibited to be exported by proclamation or order in council, the proclamation or order in council, the proclamation or order way prohibit or restrict the carrying of them coastwise; and when such prohibition or restriction is invaded, the goods are forfeited.

forfeited.

MISCHILANEOUS REGULATIONS.

Provision made for the construction of abbreviated terms,—among these, the term "Limits of the East India Company's charter" means all places and seas eastward of the Cape of Good diope to the Straits of Magelian; the terms "collector and comptroller" mean those of the port intended in the sentence; the term "ware-house" means any place, whether house, shed, yard, timber-pond, or other place in which goods entered to be warehoused upon importation may be kept, and secured without payment of duty, or although prohibited to be used in the United Kingdom; and the term "queon's warehouse" means any place provided by the crown for lodging goods therein for security of the customs. § 194 The island of Malta and its dependencies are deemed in Europe.

§ 194 The island of Malta and its dependencies are deemed in Europe.
§ 195 Dutiles, bounties, and drawbacks must be paid and received in British currency, and according to imperial weights and measures; and where they are imposed and allowed according to any specific quantity or value, they apply in the same proportion to any greater or less quantity or value; and all duties, bounties, and drawbacks are under the management of the commissioners of the customs.

of the customs.

§ 196 All bonds in respect of goods or ships are taken by the collector and comptroller; and after expiration of 3 years from the date, or from the time for performance, every bond upon which no prosecution or suit has been commenced is void.

§ 197 The same instruments, tables, and scales of graduation, and the same rules and methods, followed by the officers of excise, are to be employed by the officers of the customs for the duties on imported spirits.

of payment.

The tounage or burden of every British ship within the meaning of the act, is that sat forth in the certificate of registry, and the tonnage or burden of every other ship must be ascertained in the same manner as those of British

certained in the same manner as those of British ships.

The officers at any port under British dominion where there is a collector and comptroller may refuse to admit any person to act as master of any British ship, unless his name be inserted in or indorsed upon the certificate of registry as master, or until his name be so indorsed by such collector and comptroller.

Persons falsifying, or counterfeiting, or using, when falsified or counterfeited, documents for the unlading, lading, entering, reporting, or clearing of ships, or the landing or shipping of goods, &c., or by any false statement procuring such document, forfeit £200; but the penalty does not attach to any particular offence for which any other penalty is expressly imposed.

When any person makes application to an officer on behalf of any other person, the officer may require of the person applying a written authority from the person for whom he acts before transacting business.

Any person making a false declaration, except as to the value of goods, and any person not truly answering questions authorized by any customs act, forfeits £100, over and above any other penalty.

other penalty.

Other penalty.

All articles by this or any other customs act declared to be forfeited, may be seized by any officer of the customs; forfeitures of vessels include the puns, tackle, apparel, and furniture; forfeitures of goods include the packages.

Articles forfeited, or detained as undervaused, may be restored on such terms as the commissioners may think fit; and if the proprietor accept the terms, he can have no action for recompense or damage.

If a ship have become liable to forfeiture, or the master to any penalty on account of groots

recompense or damage.

If a ship have become liable to forfeiture, or the master to any penalty on account of goods laden or unladen, which are small in quantity or of trifling value, and it appear to the satisfaction of the commissioners, that they had been lader or unladen contrary to the intention of the owners, or without the privity of the master, as the case may be, the commissioners may remit the forfeiture, and remit or mitigate the penalty, as they shall see reason to acquit the master of all blame, or more or less to attribute the offence to neglect of duty.

If any ship coming up or departing out of port do not bring to at the stations appointed by the commissioners, for the boarding or landing of officers, the master forfeits £100.

The commissioners, and the collector and comptroller of any port, may station officers on board any ship while within port, the master providing each with sufficient room under the deck, in some part of the forceastle or sterage, for his bed, and in case of neglect or refusal, forfeiting £100.

When goods are warehoused for security of the duties, or to prevent them from coming

ployed by the officers of the customs for the du-ties op imported spirits.
§ 198 The officers of the customs may take sam-ples of goods for ascertaining the duties, to be disposed of as the commissioners may direct.
§ 199 For adapting alterations in the law to current transactions, it is provided that impor-tation is deemed to have had effect at the time at which the ship had actually come within the work of the duties, or to prevent them from coming time to the port of reporting and discharging,

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for the like goods when warshoused in any warehouse in which they may be warshoused without payment of duty; but the Commissioners of the Treasury, or of the Customs, by warrant under their hands from time to time may fix the amount of rent for goods secured in any of the warshouses.

In case goods are not cleared from the warshouse within 3 calendar months (or sooner, if they be of a perishable nature), the commissioners may cause them to be sold by auction, for home use or exportation, as the case may be, the produce to be applied towards the payment of the duties, if sold for home use, and of the warshouse rent and other charges, and the overplus (if any) being paid to the person authorized to receive the same. They may cause such goods to be destroyed as cannot be sold for a sum sufficient to pay duties and charges, if for exportation: Provided that if the goods have been landed by the foficers, and the freight of the same has not been paid, the produce must be first applied to the payment of freight.

The crown is empowered by commission out of the Exchequer, from time to time to appoint any port, haven, or creek, and to seponate the produce must be first applied to the payment of the Exchequer, from time to time to appoint any port, haven, or creek, and to seponate the limits thereof, and to appoint any pare such, and to appoint

business as clerk, servant, or agent to any other person.

Any such agent or agents in copartnership may appoint any person without license to be a clerk in transacting such agency: Provided that no person can be admitted to be clerk to more than one agent or copartnership, nor until his name and residence, and the date of his appointment, have been indorsed on the agent's license, and signed by him, and witnessed by the signature of the collector and comptroller, unless such person have been appointed with consent of the commissioners before the commencement of the act. No vessel employed ordinarily for the carries of letters is permitted to import or export without permission of the commissioners, under penalty of £100 against the master.

No person is to be deemed an apprentice in terms of the act 4 Geo. IV. c. 25, for regulating the number of apprentices to be taken on board British merchant vessels, dc., unless the index the commissioners of the London or Dublin Garies have been enrolled with the collector and any other port in British or Ireland.

[For abridgments of the other acts connected with the customs and the regulation of navigation, eee Shippino, Shuggling, Taripp, Warehousing.]

CUTLERY. [HARDWARE AND CUTLERY.]

CUTTER, a sharp, light-built vessel, with one mast, running bowsprit, and fore and aft sails. Cutters are chiefly used as cruisers after smugglers, for conveying

despatches to a fleet, and for private sailing yachts.

CUTTLE-FISH, a molluscous class of animals (Cephalopoda) of which seven CUTTLE-FISH, a molluscous class of animals (Cephalopoda) of which seven species are indigeneus to our seas, the most common being the Sepia officinalis, found in profusion on the shores of Hampshire, and other parts. The cuttle-fish is celebrated for the effusion, from a small bag, of a deep black fluid, by which, in exigencies, it clouds the surrounding water, in order that it may conceal itself. This excretion is manufactured into the pigment called sepia, and it is believed by many that China-ink is made from it. The internal plate or bone, being hard on one side while it is soft and yielding on the other, is sometimes used as a mould; it is also employed for cleaning or polishing silver; and when ground it furnishes "pounce," a material used by scribes for crasures.

CYPRESS, a forest tree, the most important species of which are the evergreen cypress (Cupressus sempervirens) and the white cedar (C. thyoidss). Of the former there are two varieties, the upright and the spreading,—the last affording the

there are two varieties, the upright and the spreading,—the last affording the larger and more valuable timber. It is a native of the south-eastern parts of Europe, particularly of Italy, where it is beautifully applied in the terraced scenery of villas; but it is not much cultivated in England,—the climate being too damp and cold for it in summer. Its wood is hard, elastic, and, though not so

beautiful in colour as mahogany, it is stronger, resists the worm equally well, and its odour repels insects from whatever may be contained in a cabinet or chest made of it. In order to preserve the remains of their heroes, the Athenians buried them in coffus of cypress; and the chests in which the Egyptian mummies are found are usually of the same material. The precise period to which the tree lives has not been ascertained, though the fact of its being planted over the graves of the dead, and carried in funeral processions as an emblem of immortality, may be regarded as a presumption that its duration must be very considerable.

The American cypress or white cedar is a native of Mexico and of the southern parts of North America,—luxuriating in the deadly swamps of the Mississippi. It grows to a considerable size, but slowly, being eighty years old before it is fit for timber, which even then is not very valuable, though it answers well for hoops, boats, roofing, and some other purposes.

DAMAGED GOODS are those subject to customs duties though they have received some injury in their conveyance into the country, or in the bonded ware-

Not more than 63-64th parts to be allowed on damaged goods. (Board Order, May 31, 1771.) At the out-ports, damages exceeding £10 not to be allowed without the Board's sanction, and not after the goods are in the merchant's possession. (B. O. Jan. 4, 1817.) Surveys for damage not to take place until the parties have first petitioned. (B. O. Jun. 5, 1817.) The chief other rules are contained in the act 3 & 4 Wm. IV. c. 52, § 30-32, an abstract of which is given under the head Customs Regulations.

is given under the head CUSTOMS RECOLLATIONS.

DAMASK (Fr. Venise. Ger. Damasten Tafelseug. It. Tela damaschina.

Por. Guarnicao de mesa adamascada. Sp. Tela adamascada), a description of silk or linen cloth, of thick texture but fine in quality, with elaborate figures or flowers. It is a twilled fabric, and said to have been first made in Damascus. Linen damask is at present manufactured extensively at Dunfermline in Scotland, and in Ireland, for tablecloths and napkins. That made for curtains and similar articles, is for tablecloths and napkins. That made for curtains and similar formed of a mixture of silk with linen, cotton, or woollen. [Linen.]

DAMMER, a resinous substance much employed in India for covering the bottoms of vessels. It is hard, dark-coloured, and brittle; and is exported in large quantities from the Eastern Islands and Malayan Peninsula to India. It exudes spontaneously from a tree, said by Mr Milburn to be a species of pine (Shorea robusta, Roz.); but according to Mr Crawfurd it is obtained or various kinds from

robusta, Rox.); but according to Mr Crawfurd it is obtained of various kinds from different trees. It is so plentiful that it is gathered in lumps from the ground where it has fallen.

DANTZIC. [Prussia.]

DATE (Fr. Dattes. It. Datteri. Sp. Dattles), the fruit of the date palm (Phanis datylifera), a tree which forms the chief object of cultivation along the verge of the desert, which, with but few interruptions, extends from the shores of the Atlantic to the confines of Persia, a district where none of the cerealia will grow, owing to the aridity of the soil and the want of moisture. Between the States of Barbary and the Desert, it is so abundant that this region is called Beid-ulgerid, or the Land of Dates. There are upwards of a hundred varieties; but in general it may be described as acorn-shaped, composed of a thin glossy membrane which contains a fine soft and pulpy fruit that is firm, sweet, and rather vinous to the taste; within this is enclosed a solid, tough, hard kernel. Ripe dates cannot be kept for any length of time without fermenting and becoming acid; whence those which are intended for storing or exportation are dried in the sun upon mats. They are exported in large quantities from Arabia to India; and a upon mats. They are exported in large quantities from Arabia to India; and a few are brought to this country from the Levant and Barbary.

few are brought to this country from the Levant and Barbary.

"In the Hedjar, the new fruit called ruteo comes in at the end of June, and lasts two months. The harvest of dates is expected with as much anxiety, and attended with as general rejoicing, as the vintage of the South of Europe. The crop sometimes fails, or is destroyed by locusts, and then a universal gloom overspreads the population. The people do not depend upon the new fruit alone, but during the ten months of the year when no ripe dates can be procured, their principal subsistence is the date paste, called adjove, which is prepared by pressing the fruit, when fully matured, into large baskets. "What is the price of dates at Mecca or Medina?" is, says Burckhardt, always the first question asked by a Bedouin who meets a passenger on the road." (Lib. of Bnt. Knowledge, Veget. Substances, vol. 1. p. 387.)

The Date Palm is a majestic tree which shoots up in one cylindrical column to the height of 50 or 60 feet, without branch or division, and throws out from the summit a magnificent crown of leaves. It is distinguished as male and female, one plant bearing the fruit and another the blossom. In the East, it has always been the subject of universal veneration. It is the palm-tree of Scripture, where it is frequently selected as the emblem of the majesty and beauty of rectitude; and both in ancient and modern times, the leaves have been used as the symbol of triumph. Its

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extensive importance is one of the most curious subjects in natural history; for a considerable part of the inhabitants of Egypt, Arabia, and Persia, subsist almost entirely upon its fruit. They boast also of its medicinal virtues. Their cameis feed upon the date stones; from the leaves they make couches, baskets, bags, mats, and brushes; from the branches, cages for their poultry, and fences for their gardens; from the fibres of the boughs, thread, ropes, and rigging; from the map is prepared a spirituous liquor; and the trunk of the tree furnishes fuel. It is now said, that from one variety of paim-tree meal has been extracted from among the fibres of the trunk, and has been

DAY-BOOK.

DAY-BOOK. [BOOK-KERFING.]
DAYS OF GRACE, a certain number of days granted to the acceptor after the term of a bill is expired. In the British dominions these amount to three; but if

term of a bill is expired. In the British dominions these amount to three; but if the third should be Sunday, Good-Friday, Christmas-Day, or a fast appointed by proclamation, the bill is payable on the second day of grace. They run on all bills payable on a day fixed, or at so long after date, or after sight; but not on bills payable on demand, though they do (at least in England) on those payable at sight. DEAD-WEIGHT, the name given to an advance by the Bank of England to government, on account of the half-pay and pensions of retired officers of the army and navy. After the end of the war, the sums thus payable amounted to about £5,000,000 per annum; and the ministry being desirous to relieve their present necessities by spreading the burden more equally over the 45 years, which in 1822. necessities by spreading the burden more equally over the 45 years, which, in 1822, were calculated as the mean probable duration of the lives, offered (4 Geo. IV. c. 22) to pay to any capitalists an annuity of £2,800,000 for that period, on condition of provision being made for the pensions on the basis of a graduated scale of payments; commencing in the first year at £4,900,000, and ending at £300,000. The South Sea directors entertained the project for a time, but soon discovered that it was beyond their means; ministers had then recourse to the Bank of England, who, in beyond their means; ministers had then recourse to the Bank of England, who, in 1823, accepted the offer to a limited extent, and advanced to government, in the course of five years, £13,089,419, receiving in return an engagement to pay an annuity of £585,740 for 44 years, ending October 10, 1867. The bank has not yet disposed of any part of this security: a portion of it was, however, exposed for sale on the 17th July 1839; and an account of the offers then received will be found in the late Report on Banks of Issue. (Par. Paper, 1840, No. 602. App. p. 263.) DEALS (Dan. Dæler. Du. Deelen. Fr. Planches minces. Ger. Dielen. Rus. Doski. Sw. Tiljor), the name given in the wood-trade to the timber of the pine when sawed into planks, in which form it is imported into this country from the N. of Europe and British America. Standard deals are boards above 7 inches in width and of warious langths exceeding 6 feat. When less than 7 inches in width

width, and of various lengths, exceeding 6 feet. When less than 7 inches in width they are termed battens, and when under 6 feet in length, deal-ends. The American deals are inferior in strength, and do not last so long as those of the N. of Europe, particularly Christiania; hence the latter are usually preferred for the flooring of houses, and other purposes where durability is required. But the former are used where cheapness is the principal consideration, as in building small houses; they are also preferred for many little articles, the internal fittings of houses, and other

purposes which require wood that can be easily worked.

DEBENTURE, the certificate given at the customhouse to the exporter of goods, on which a bounty or drawback is allowed, bearing that he has complied with the statutory regulations, and is entitled to such bounty or drawback.

[CUSTOMS REGULATIONS.]
DECIMAL FRACTIONS differ from vulgar fractions in this respect, that their denominators are always 10, or some power of 10, as 100, 1000, &c., and instead of writing the denominator under the numerator, it is expressed by pointing of from the right of the numerator as many figures as there are ciphers in the deno-

minator; thus '5, '43, 5'26 denote, respectively, $\frac{5}{10}$, $\frac{43}{100}$, $5\frac{26}{100}$, or $\frac{526}{100}$. The value of each figure in a decimal decreases from the left to the right in a tenfold proportion; that is, each figure is ten times as great as if it were removed one place to the right, as in whole numbers; thus, '5, '05, '005, are $\frac{5}{10}$, $\frac{5}{100}$, $\frac{5}{1000}$, &c., and the de-

cimal '438 is four-tenths, three-hundredths, and eight-thousandths of a unit.

Adding ciphers to the right of a decimal does not alter its value; thus, '5, '50, 500, or $\frac{5}{10}$, $\frac{80}{100}$, $\frac{800}{1000}$, are equal to each other, the numerator and denominator having been multiplied by the same number.

Decimals may be reduced to a common denominator by adding ciphers to the right, where it is necessary, till the number of decimal places is the same in all.

Thus, '5, '03, and '564, reduced to a common denominator, are '500, '030, and '564; that is, $\frac{500}{1000}$, $\frac{030}{1000}$, and $\frac{564}{1000}$

The consequence of this method of expressing fractions is, that addition, subtraction, multiplication, and division, are performed exactly as in common arithmetic; the only difference being, that we have, besides, to ascertain the place of the decimal point. In addition and subtraction, having placed the decimal points under one another, and filled up the decimals, or supposed them to be filled up, all to the same number of figures or places with ciphers, the same number of decimal figures or places must be made in the result as in each of the lines. In multiplicand, the number of decimal places in the result must be the sum of those in the multiplier and multiplicand; and, in division, it must be the difference of those in the divisor and dividend. Thus, the sum, difference, product, and quotient of 8-988 and 1-96, is 10-945, 6-125, 15-84690, and 4-1, respectively.

Multiplication. Divisions Divisions and the sum of the sum. Division Divisio

Addition. 8:085	Subtraction. 8:085	Multiplication. 8-085	Division.	•
1.96	1.96	1.96	8-085	
Sum 10:045	Difference 6:125	Product 15:84660	1:96	Quotient

To reduce a vulgar fraction to a decimal, add ciphers at pleasure, as decimals in the numerator, and divide by the denominator, according to the rule for the division of decimals.

Example
$$\frac{3}{4} = \frac{3.00}{4} = 75$$
.

From the very nature of numbers, it must frequently happen that this division may be continued without termination; but, as the figures always decrease a tenth in value by each remove to the right from the point, decimals may be stopped, except in long calculations, at three or four places, without any great degree of error; and even in continued multiplications, when the decimals are stopped at a given place, we have only to increase the last figure by 1, if the next figure was to be 5 or above it, in order to compensate for cutting them short.

To find the value of a decimal of one denomination.

To find the value of a decimal of one denomination.

The description of the stopped of the

multiply the decimal by the number of integers of the lower denomination contained in one integer of the higher, and the product is the value required. The value of any fractional part of the lower denomination may be obtained in the same manner, till we come to the lowest.

denomination.

Divide the quantity by the number of integers of its denomination contained in 1 of the superior denomination and the quotient is the decimal required.

Example, What decimal of a pound is 13s. 4id.?

Example, Required the value of 46875 £

Hence, the value required is 13a. 4jd.*

The proofs of the rules for the management of decimal fractions here given are necessarily confined to particular instances, but the same reasoning may be applied in every case.

The following table of equations between vulgar and decimal fractions will be found useful in practice:—

practice :-TARRED DECIMAL FORESTE

	TABLE OF DECIRAL INCUIVALENTS.									
1	0167	A 1333	₼ 2667	18 ·3833	₩ .5167	18 6333	18	7067	118	-8833
1 2	-0208	- 1458 - 1458	₹, 2 708	18 3958	25 ·5208	#1 6458	11	.7708	Ħ	-8958
1 **	-0250	♣ ·1500	18 -2750	4000	₹} ·5250	18 6500	#	7750	4	9000
1 *	-0312	A ·1562	-2812	14 4062	11 -5312	\$1 -6569	1	·7812	1	-9062
₩	-0333	1 1667	11 2833	4 4167	A .5333	6667	#	7833	11	·9167
1	-0417	表 1750	- 2 917	17 4850	44 · 5417	₹3 ·6750	H	7917	##	9250
70	-0500	1833 ·1833	₼ 3000	18 4333	13 .5500	13 6833	ŧ	*8000	11	.9333
76	-0625	A ·1875	A 3125	1 4375	♣ -5625	11 6875	18	*8125	#	9375
4	0667	1 -2000	18 ·3167	₽ 4500	11 5667	表 7000	48	18167	38	9500
A	0750	A ·2083	18 -3250	11 4583	28 ·5750	11 7083	11	-8250	44	9683
₩.	-0633	18 -2167	3 ·3333	- ·4667	-7 ·5833	18 7167	ŧ.	·8333	38	9667
A	-0937	· 2187	11 3437	14 4687	14 -5937	孙 7187	#	8437	#	-9687
₩.	1000	2250	· 3500	18 4750	# ·6000	28 7250	15	·8500	48	9750
*	-1042	11 -2292	11 -3549	24 ·4792	38 6042	# ·7292	ŧi	8542	#	-9792
ä	-1167	- 2333	13 3667	#8 ·4833	86 ·6167	11 7333	11	·9667	88	-9833
ì	1250	£ -2500	3750	₹ 5000	4 .6250	4 7500	Ŧ.	·8750	#8	1.

* The following rule to convert decimals of a pound into shillings and pence will be found more convenient in practice:—

Double the first decimal on the right of the point for shillings, increasing this number by 1, if the

Donote the first decimal on the right of she point for similary, increasing this humber by 1, it are second decimals be 5, or above it.

Consider the number expressed by the 2d and 3d decimals (deducting 50, if 1 was added to the shillings) as farthings; diminishing, however, this number by 1, if it be above 12, and less than 37; and by 2, if it be above 35. The other decimals may be neglected.

DEL CREDERE, in its restricted sense, is an engagement by an insurance broker, for an additional premium, to guarantee the insured against the consequences of the failure of the underwriter. In its ordinary mercantile acceptation, it embraces every commercial transaction, in which the person who transacts for another engages for the solvency of the person with whom he so bargains. A factor employed to dispose of property, in the usual mannor, is only responsible to his principal for the consequence of neglecting that degree of care which a prudent man takes of his own affairs; and if he sell to a person in good credit, and that person fail, he is not responsible for the delt. If the factor or agent, however, hold a del credere commission, he engages, in consideration of an additional prehold a del oredere commission, he engages, in consideration of an additional premium, to guarantee all his transactions. His responsibility extends to the absolute payment, and so it is not sufficient that he remit the price by bills to his principal, mum, to guarantee an instransactions. This responsibility extends to the absolute payment, and so it is not sufficient that he remit the price by bills to his principal,—he is responsible for their being honoured (M'Kenxie and Lindsay v. Scott, 6 Brown's Par. Cases, 280). It was formerly held that this was a contract in which the agent "engages to ensure to his principal not only the solvency of the debtor, but the punctual discharge of the debt," and that "he is liable in the first instance without any previous demand from the debtor" (Paley on Principal and Agent, 41; and see, in Scotland, Bell's Com. i. 378). But the later doctrine is, that "a factor or broker acting under a commission del creders is a surety to his principal for the solvency of those with whom the principal deals through his agency. He is in no case, as regards his own employer, himself the principal in any contract he may make for him, and is liable only in default of those with whom he deals. It follows, therefore, that before he can be charged, it must be averred in the declaration, and proved at the trial, that the principal debtor has made default." (Note to Lloyd's Paley, p. 111.) [Facrora. Principal and Agent.]

DELFT, a kind of earthenware, covered with an enamel or white glazing, which gives it the appearance and neatness of porcelain. It was so called from the town of that name in South Holland, the original seat of the manufacture, but which, since the improvements introduced into the English potteries by Wedgewood, is no longer a place of any note.

which, since the improvements introduced into the English potteries by Wedgewood, is no longer a place of any note.

DELIVERY. [Sale. Stoppage in Transitu.]

DEMERARA. [Gulara.]

DEMURRAGE is applied to designate the time during which a vessel is detained beyond that originally stipulated in loading or unloading; but it is more commonly applied to the compensation which the freighter has to pay for such detention. The freighter usually agrees to load and unload within a certain time, and comes under a subsidiary stipulation to pay so much by way of demurrage if the time be exceeded, in which case it is generally fixed at a certain rate per day. In computing the number of days to be paid for, it may be a question whether they should be computed "running," i. e. without the exception of Sundays and holidays, or whether these should be excluded and "working" days only counted. It would appear that the interpretation of the word "days," in this respect, will depend on the custom of the place; and so it was decided, on evidence of oustom, would appear that the interpretation of the word "days," in this respect, will depend on the custom of the place; and so it was decided, on evidence of custom, that when a vessel was employed on a voyage from the Elbe to London, with reference to unloading in the Thames, working days only were included (Cochran v. Retberg, 3 Esp. 121). Sometimes the demurrage is to run while the ship is detained by certain circumstances, e. g. while she is waiting for convoy, or until her cargo be completed. In the former case the demurrage ceases when the convoy is ready to depart, and in the latter when the ship is fully laden; and will not be continued by the vessel being detained, nor renewed on her being driven back by stress of weather. When there is a stipulation for demurrage, it is payable though the delay be not attributable to the conduct of the freighter, but to the crowded state of the docks, or to other extraneous causes. Demurrage is, properly speaking, the result of a stipulation, but it is often applied to the damages or compensation which the freighter must pay for having detained the vessel, when there pensation which the freighter must pay for having detained the vessel, when there is no special agreement, or beyond the time sanctioned by such agreement. The amount of damage in either of these cases must depend upon circumstance and amount of damage in either of these cases must depend upon circumstance and usage; but in the latter case there is generally a means of measuring the amount, by that of the stipulated demurrage. Where a bill of lading has a note on the margin importing that the goods are to be removed at a certain time, otherwise a certain sum per diem is to be charged for delay, whoever claims the goods under the bill becomes responsible for the sum. It was decided in Evans v. Forster, however (1 Barn. & Ado'. 118), that where there is no such note, the master cannot claim damages from the consignee on the implied contract. (Abbot on Shipping, 178-188.) [Affreightment. Bill of Lading. Charter-party. Shipping.]

DENARIUS, the chief silver coin in Rome down to the time of Constantine I., and worth, according to Pinkerton, about eightpence of our money. It originally contained ten asses, but after the first Punic war it became the representative of sixteen asses. The word denarius was also applied to coins of copper and gold. The denariis eris began with the Emperor Valerian, and six of them are supposed to have been equivalent to the silver denarius. The denarius aureus, the ordinary Roman coin of gold, was equivalent to twenty-five silver denarii, or a hundred

DENMARK, a kingdom lying in the N. W. of Europe, between 53° and 58° N. and 18° and 13° E. Area, 21,472 square miles. Subdivisions and population:

—1. Islands of Zealand, Funen, and others, 697,900; 2. North Jutland, 525,900; 3. South Jutland, or Duchy of Sleswick, 340,500; 4. Duchy of Holstein, 439,900; 5. Duchy of Lauenburg, 55,900; total, 2,040,100. Copenhagen, the capital, is situated. in Zealand. The government is a hereditary monarchy, formerly absolute; but in 1834 representative assemblies, with a consulting voice, were instituted in each of the four principal divisions; the small duchy of Lauenburg having long possessed a diet of its own. As Duke of Holstein and Lauenburg, the king is a member of the Germanic confederation.

a diet of its own. As Duke of Holstein and Lauenburg, the king is a member of the Germanic confederation.

The aspect of Demnark, generally, is that of a rich, well-cultivated country. The surface is flat, covered in some places with sands and marshes; and forming, with the exception of Holland, the lowest part of the great plain of Northern Germany. There are no mountains, for the highest inequalities of soil in Holstein and Eleswick do not exceed 1000 feet; and the islands in many places scarcely rice above the level of the sea. From its proximity to the ocean, the climate of Denmark is warmer than its latitude indicates. At Copenhagen the mean temperature of the year is 45.63; that of the warmest month being 65.65; and of the coldest, 37.14. The structure of the land, no part of which is more than 40 miles distant from the coast, does not allow the formation of large rivers. Those navigable are the Eyder, which rises in Holstein, and falls into the North Sea at Tonningen, and the Trave, which enters the Baltic at Lubec. The former is navigable for about 105 miles, the latter for about 65. The want of such rivers is, however, amply compensated by the numerous fords or firths, which indent the coasts. There are four canals. The largest is the Sleswick-Holstein, or Eyder canal, which conveys the Eyder from Rendsburg to the Gulf of Kiel, and thus unites the North Sea with the Baltic. It is 10 feet deep, and about 37 miles in length, and carries vessels of 130 tons. In 1838, no fewer than 2442 passed this canal, of which, however, only II were British. The Stecknitz canal connects the Eibe with the Gulf of Lubec; the others are the Daneskield in Zealand, and the Odensee in Funen.

Demnark possesses no mines, and scarcely any mineral substances of importance; but agriculture has undergone greater improvements of late years than perhaps any other branch of national industry. The soil is chiefly composed of sand and clay, and the constant humidity of the atmosphere is favourable to vegetation. The pasturages are fre

The Danes are also actively engaged in the cod fishery of the North Sea, and the Greenland whale fishery.

The government has afforded great encouragement to manufactures; but in no department (except under the protection of exorbitant duties) can the people compete even in their own markets with foreign rivals. The peasants employ themselves in working up their flax and wool into coarse cloths. In Copenhagen there are factories for silk and cotton weaving, constructed on similar principles with those of Engiand; Randers and Odensee are famous for their tanneries and gloves; Tonder for its lace; Frederickswark, Elsineur, and Holbeck for manufacturing large and small firearms. Lauenburg contains soap-works, breweries, and potteries for common Dutch ware; Altona carries on different manufactures; Oldeslohe, on the river Trave, is distinguished for its alt-works. Flensborg, a flourishing town, besides manufactories of soap and tobacco, has a considerable number of oll-mills and sugar-refineries.

The commerce of Demmark is inconsiderable, though, from being the key of the Baltic, it possesses peculiar advantages for a ready intercourse with most of the maritime states of Europe. This arises partly from high transit dues, but chiefly from the oppressive imposts which are levied with the view of sustaining the home manufactures. Much attention is, however, bestowed on navigation, and from the economical manner in which it is conducted, the Danes possess a considerable share of the carrying trade of other nations. At present the number of their slips is estimated at upwards of 3700, in burden 143,900 tons.

The exports consist almost wholly of the raw produce of the kingdom and its dependencies. In 1831, their amount was £1,289,611; in 1834, £1,656,771; and in 1835, its was £1,989,116. The chief articles were butter, 66,665 barrels, value £385,062; rapesced, 53,832 quarters, value £293,368; barley, 294,721 quarters; oats, 68,312 quarters; vev. 75,101 quarters; wheat, 100,000 quarters; horses, 7566; cattle, 38,323; po

vessels which annually depart for foreign countries from all the ports of the kingdom is rather more than 4000; the tonnage being about 230,000. The imports, exclusive of those from Britain and the Danish West India islands, consist of piece goods, tobscoo, and colonial produce from Hamburg and Bremen; linen, flax, wood, staves, and timber from Prusia; iron, then, flax, tells, timber, fish, herrings, and train-oil from Sweden and Norway; hemp, flax, ashes, tallow, seeds, and timber from Russia; piece goods and colonial produce from the Netherlands; and wine, salt, and piece goods from France.

ber from Russa; piece goods and colonial produce from the Netherands; and wine, and piece goods from Franca.

The trade betwirt Demmark and the United Kingdom is increasing. The declared value of British and Irish produce and manufactures imported on an average of the 10 years 1827-1835, was £101,037; in 1837, the amount was £103,448; in 1838, £181,464; consisting chiefly of iron, coals, and salt, with small quantities of carthenware, cotton twist and yarn, giase, hardware, lead, machinery, dec. The importations of foreign and colonial articles from the United Kingdom in the above period has greatly declined. The exports to Great Britain from Demmark chiefly consist of rapeased, flaxeed, linesed, tares, wool, corn, pease, beans, hides, and bark. A considerable increase is observable of late years in the importation of wool and rapeased, now the two principal articles. About 50,000 tons of British shipping (vessels 227) annually arrive in the Danish ports, more than 4-5ths of which enter Copenhagen.

The principal ports are Copenhagen and Elsineur.

Copenhages, one of the best built cities in Europe, stands on the E. coast of Zealand, in lat. 55° 41'N. and long. 13° 30' E.; pop. 130,000. The walls extend nearly 5 miles, and are surrounded with a chain of bastions and a broad ditch. The harbour, formed by a narrow channel running between the city and the island Amak, is capable of containing 500 vessels, and possesses depth sufficient for ahips of the largest size. Exports are principally the produce of the oil, and colonial articles; and the imports are sugar and coffee, chiefly from the island of St. Croix, with small quantities of iron, oil, blubber, tar, fish, and fruit. About 1900 vessels arrive annually from foreign ports.

Bistonear, in 18t. 56° 2' N. and long. 13° 37' E., stands on Zealand, about 30 miles N. from Copenhagen, at the narrowest part of the strait between the Cattegat and the Baltie, called the Sound;

foreign ports.

Elineur, in lat. 56° 2′ N. and long. 12° 37′ E., stands on Zealand, about 30 miles N. from Copenhagen, at the narrowest part of the strait between the Cattegat and the Baltic, called the Sound; pop. 9000. The harbour is accessible only to vessels of small draught, but the town derives importance from its being the place where a toll is levied by the Danish government on all vessels passing the Sound. BOUND-DURS. J Above 19,000 anchor in the roads annually for this purpose, the supplying of which with stores forms the principal trade of the place.

The chief other ports are Altona, Kiel, Fiensborg, Touningen, Aalborg, Kiele, Nostoed, Corsoer, Callundborg, and Eckenforde. Many parts of the Danish coast are useless, owing either to the want of deep water, or the numberless banks, bars, and islands which line it. The shores of the islands adjoining the Blaitic are also so flat and irregular as to be unapproachable in most quarters by large vessels.

MEASURES, WEIGHTS, MONEY, FINANCES, &c.

ute miles

The Danish acre, or ton of land, forms an area of 14,000 square ells of 2 feet, and from 10 to 25 of such acres are reckoned to each ton of hard core, in proportion to the quality of the

are current at a fixe soil.

The viertel of 4 kans, or 8 pots = 170 Imp. galls. the hogshead of 30 viertels = 51 Imp. galls. The hogshead of 30 viertels = 51 Imp. galls. The toende or barrel of 8 skieps, or 144 pots = 363 Imp. bushes; or 60 barrels = 39 Imp. qrs. nearly; the last of corn contains 12 teendes, or 4591 Imp. bushes; the last of coals 18 toendes; and the last of oil, butter, or herrings, 12 beer toendes, each of 135 pots.

The shippond of 30 lisponds, or 320 lbs. = 34 ewt. nearly; and the centner of 100 lbs. = 130 kg mounted to £1.5 kg. avoird. The ship-last is 4000 Danish lbs. The Copenhagen mark of 8 ounces used in weighing gold and silver = 3633 troy grains.

Money.—Accounts are generally stated in rigsbank dollars, each divided into 6 marks, or 26 killings; but in some of the larger mercantile bouses they are kept in Hamburg marcs banco. The rigsbank dollar, colned at the rate of 18k skillings; but in some of the larger mercantile bouses they are kept in Hamburg marcs banco. The rigsbank dollar, colned at the rate of 18k from the Cologne mark of fine silver (3608 troy grains), is equal to one-half of the old species dollar, and when of full weight is worth about 28 24d; the par of exchange with London being Red Disk and when of full weight is worth about 28 24d; the par of exchange with London being Red Disk Messra Rothschild.

Measures and Weights.—The ell of 2 Rhine-change business, however, is transacted through land feet = 244 Imp. inches; the mile of 2400 the medium of Hamburg, the par being 200 R. ruthes = 8944 Imp. yards, or 4-684 British stat-

the medium of Hamburg, the par being 200 R.
D. for 300 marcs beanco, independent of the agio on banco.
The National Bank at Copenhagen, formerly called the Royal Bank, or Rigabank, issues notes for 1, 5, 10, 50, and 100 rigabank dollars; these are current at a fixed discount for specie, called rigabank silver value, which is adjusted by certain anthorities quarterly. The circulating medium consists almost wholly of this paper, and according to recent statements it is now nearly of equal value with specie. The coins or rather tokens of inferior value are marks and skillings. There is no established usance, but bills are generally made payable on a certain day, and 8 days of grace are allowed.

Finances.—The public revenue, in 1837, amounted to £1,584,133, of which land-tax, £306,690; customs and excise, £416,334; crown property, £181,331; sound-dues, £213,967; and the receipts, £376,061. The expenditure in the same year was £1,661,282; including for army and navy, £437,183; interest of debt, £521,065; sinking fund, £97,882; including for army and navy, £437,183; interest of debt, £521,065; sinking fund, £97,882; including for army and navy, £437,183; interest of debt, £521,065; sinking fund, £97,882; including for army and navy, £437,183; interest of debt, £521,065; sinking fund, £97,882; including for army and navy, £437,183; interest of debt, £521,065; sinking fund, £97,882; includes a long for the same year was £1,661,282; including for army and navy, £437,183; interest of debt, £521,065; sinking fund, £97,882; includes a long for the same year was £1,661,282; includes a long for the same year was £1,661,282; includes a long for the same year was £1,661,282; includes a long for the same year was £1,661,282; includes a long for the same year was £1,661,282; includes a long for the same year was £1,661,282; includes a long for the same year was £1,661,282; includes a long for the same year was £1,661,282; includes a long for the same year was £1,661,282; includes a long for the same year was £1,661,282; include

R. D. 10 skill, per z.s. Albany,
DEPOSITS. [BANK. CURRENCY.]
DERBYSHIRE SPAR. [FLUOR SPAR.]
DERBYSHIRE SPAR. [FLUOR SPAR.]

Of those the Admiralty has the at sea, and found without any person in them. Of these the Admiralty has the custody, and the owner may recover them within year and day. An allowance is made for the salvage of derelict vessels, where it has been attended with danger (Sir T. E. Tomlins' Dictionary.) DESIGNS or patterns for various articles of manufacture may be rendered the subject of copyright, and thus secured, for a limited time, for the exclusive use of the inventor. There is copyright in patterns on linen, cottons, calicoes, or muslins; also on fabrics composed of wool, silk, or hair, and on mixed fabrics composed of any two of the following materials, namely, linen, cotton, wool, silk, or hair. The privilege exists for three months from the publication (by manufacture and sale), provided the name of the proprietor be printed at each end. (34 Geo. III. c. 23, 2 & 3 Vict. c. 13; 5 & 6 Vict. c. 100; 6 & 7 c. 65; 13 & 14, c. 101; 15, c. 12, s. 14.

Copyright extending to one year, and in some cases to three years, is granted in certain other manufactures, by the act 2 & 3 Vict. c. 17, of which the following is an abstract :-

certain other manufactures, by the act 2 & 3 Vict. c. 17, of which the following is an abstract:—

§ 1. Proprietors of designs for the following purposes, not published before 1st July 1839, are to enjoy a copyright of one year from the date of registration:—1st. For the pattern or print to be either worked into, or worked on, or printed on, or painted on, any article of manufacture, being a tissue or textile fabric; those which enjoy the three months' copyright just stated are excepted. At, For the modelling, casting, embosument, chasing, engraving, or for any other kind of impression or ornament, on any article of manufacture, not being a tissue or textile fabric. 3d. For the shape or configuration of any article of manufacture, except lace, and those articles which enjoy the said three months' copyright. But every proprietor of a new design for the modelling, casting, embosument, chasing, engraving, or any other kind of impression or ornament on any article of manufacture, being of any metal or mixed metals, shall have the sole right to use the same during three years. The proprietor must register his name; and every article published by him, on which such design is used, must have thereon the name of the first registered proprietor, the number of the design is used, must have thereon the name of the first registered proprietor, the number of the proprietor, mice he have for a consideration executed the work on behalf of another, who shall then be considered the proprietor; and every person purchasing for a consideration shall be considered the proprietor in any entered on the register. § 3. Any one using the design, without leave in writing from the proprietor, forfelts not less than £5, or more than £30. § 4. Frenalty may be recovered in England, Scotland, and Ireland; but all proceedings must be instituted within six months after the offence. § 5. Provision made for register of designs by Board of Trade. § 6. Three copies must be sent to the registers; one to be returned with a certificate, another to be

DEVIATION, in Marine Insurance. It is one of the implied warranties in the contract of insurance, that the voyage insured for shall be strictly adhered to, and so if a different voyage is pursued, or that stipulated for is voluntarily departed from, the contract is terminated, and the underwriter is discharged from liability. from, the contract is terminated, and the underwriter is discharged from incomity. Deviation does not void the contract, for the underwriter retains his premium, and is liable to all loss up to the point of deviation. Though the loss happen after the ship has returned to her proper course, and though it were distinctly proved that it was not caused, or even influenced by the deviation, the insurer would still be released, for the contract having been terminated by the deviation, cannot become binding again without a new agreement. A deviation is said to be "a voluntary departure, without necessity, from the usual course of the voyage." It is not to be inferred from this that the vessel must have followed the route that can be proved to be the cost direct and expeditions but that she has followed the usual course. inferred from this that the vessel must have followed the route that can be proved to be the most direct and expeditious, but that she has followed the usual customary track, sanctioned by safety and convenience. "Therefore, the stopping at certain places in the course of the voyage, though out of the direct line, if it have been customary to do so, is not a deviation, but a part of the voyage." (Marshall, 179). Still a few instances where vessels have taken a point out of their direct course will not constitute usage in favour of the practice. If deviation is once shown to have taken place, the smallness of its extent will not justify it. It is deviation if a ship insured, with liberty to touch at a particular port, touches at another. It was formerly maintained that a ship entitled to touch at a port was not entitled to trade there, but it has been since held, that if there is no delay, and no increase of risk, trading is not a breach. If there are several ports of discharge, it is held deviation to visit them in an order different from that in which they appear on the policy, and it certainly is so, if the risk is thereby increased. If the it is held deviation to visit them in an order different from that in which they appear on the policy, and it certainly is so, if the risk is thereby increased. If the ports of discharge be not specifically named in the policy, they should be taken in their geographical order. It appears to be no deviation to proceed direct to any one of a set of ports thus insured to, if the others are not visited at all. It is deviation to touch at a port at which it is not customary to touch, although the ship must pass it; or, there being several tracks, to select a less safe and eligible one for the purpose of accomplishing objects foreign to the voyage. Where a ship is insured for a voyage, with liberty to touch "at any one port" of some country, it is held to mean a port in the course of the voyage, if the country be so situated as to admit of this interpretation. Unnecessary delay is always a deviation. It

appears to be considered deviation to prescribe any one of several tracks to the master. If a specific track is predetermined by the insured, is ought to appear on the policy, and if it do not, the underwriter is entitled to expect that he will have the benefit of the master's choice of tracks, whose duty it is, when he is at liberty so to do, to adopt the best. Though there be an intention to deviate, and instructions given to that effect, the underwriter's responsibility will not be affected till the dividing point is reached, and if the vessel be previously lost, he is liable. Deviation will be justified by necessity, though proceeding from a cause not insured against, as, from stress of weather, want of repairs, desertion or mutiny among the crew, attempt to escape from an enemy, or the taking advantage of an opportunity of joining convoy in time of war. The ship may deviate to be relieved of part of her cargo, if too heavily laden, or to take in additional cargo, where necessary for ballast. Deviation to succour ships in distress is held justifiable on principles of public policy. It is a general principle that deviation will not be justified, if for the purpose of providing against the consequences of a fault of the insured, so as to allow one warranty to be infringed to cover the infringement of another. (Park, 437-475. Marshall, 174-206.) [Insurance.]

DIAMOND (Fr. Ger. & Du. Diamant. It. Sp. & Por. Diamante), a crystalline mineral, which, on account of its lustre and hardness, is reckoned the most valuable of all gems. It is chiefly found disseminated in gravel, or embedded in sand-stone in India and Rervil and accounts in the account in the lates of the proper in India and Rervil and account in the account in the lates of the proper in the part of the part of the proper in India and Rervil and accounts in the lates of the part of the pa

minerat, which, on account of its subtream and naruness, is reckoned the most valuable of all gems. It is chiefly found disseminated in gravel, or embedded in sand stone, in India and Brazil, and, according to recent accounts, in the Ural Mountains. It occurs generally in single or in unattached crystals, sometimes with plain, but more frequently with rounded surfaces. The colours are commonly white or gray, sometimes however red, brown, yellow, green, blue, and black; but the two last are rare. Lustre splendent, and internally perfect adamantine. Cleavage, parallel to the sides of an octahedron, which is its primary form, subject however to varieties, and the faces are frequently curvilinear; transparent, but however to varieties, and the faces are frequently curvilinear; transparent, but sometimes rendered opaque by foreign substances; refracts single; scratches all known minerals, and can only be cut and ground by its own substance; rather easily frangible; streak grayish. Sp. gr. 3'4 to 36. It consists of pure carbon. The finest, called diamonds of the first water, should be perfectly orystalline, resembling in complexion a drop of the purest water. When they fall short of this perfection, they are said to be of the second, third, or fourth water, till the stone may be properly called a coloured one. If yellow, blue, green, or red, in a high degree, they are more in esteem than if tinctured with these colours only in a low degree. For ornamental purposes they are cut into rose diamonds and brilliants. The Rose Diamond is generally made out of an octahedral crystal; it is quite flat underneath, and its upper part cut in divers little faces, usually triangles, the uppermost of which terminates in a point. The Brilliant is generally formed out of a diamond with curvilinear faces; it is cut in that form both at top and bottom; the table, or principal face, at top, being flat. The Rough Diamond is the formed out of a diamond with curvimear races; it is cut in that form both at top and bottom; it the table, or principal face, at top, being flat. The Rough Diamond is the stone in its natural state; it should be chosen uniform, of a good shape, transparent, not quite white, and free of flaws. Black, rugged, dirty, flawy stones, and those unfit for cutting, are however pulverized, and employed to polish others, besides being applied to various uses in the arts; and for such purposes they are in

sides being applied to various uses in the arts; and for such purposes they are in constant demand.

The weight and value of diamonds are estimated in carate, each divided into halves, quarters, eighths, &c. This carat weights 34 troy grains, or 2054 French decigrammes, and is the only weight considered uniform in all countries. The comparative value of diamonds of equal colour, cleanness, and shape, is settimated according to the squares of their respective carate weights. The average price of rough diamonds that are worth working, is £2 for the first carat. Hence the value of a rough diamond weighing 4 carats is £32; because 4 × 4 × 2 = 32. Cut diamonds are supposed to have lost half their original weight, and are therefore valued according to the square of double their actual weight. Thus the value of a cut diamond weighing 4 carats is £128; for 8 × 8 × 2= 128. This rule, however, is inapplicable to those which are above a certain weight,—the ordinary limit being 80 carats. The largest diamond ever known was brought to the King of Portugal from Brasil. It is uncut, weighs 1680 carats, and its value is often quoted, according to the above rule, at £5,644,800. Similar extravagant valuations are applied to the famous Russian one, weighing 779 carats; to the Mogul, weighing, cut, 280 carats; and to others; but it does not appear that any sum exceeding £180,000 has ever been given. The last great sale of jewels was in London on July 20, 1837, for the distribution of the Decean booty, obtained by the army under the Marquis of Hastings. On this occasion, the magnificent Nassau diamond, weighing 357; grains of the purest water, brought only £7200.

The glaster's pencil diamond is a fractured portion, weighing about 1-60th of a carat, and of a trapezoidal shape, set in a wooden handle. Two kinds are now in use, the common pencil, worth 18s.

DIAPER (Fr. Linge curré. It. Tela testuta a opere. Ger. Drell), a flowered linen fashed commonly used for table-linen, naphins, and other domestic purposes. It is manufactured in

now also made of cotton, in imitation of the linen goods bearing the same name.

DICE. [CARDS AND DICE.]
DILIGENCE, SUMMARY, a term used in the law of Scotland to express an expeditious process, by which performance of documentary obligations is enforced. It was formerly confined to the Court of Session, but since the 1 & 2 Vict. c. 114, it may proceed before the Sheriff. The document on which it is founded with the account of the court of the co must be registered in the books of the court; and the principle on which execution proceeds is, that a judgment or decree of the court has been given in favour of the holder of the document by consent of the granter. The documents thus privithe holder of the document by consent of the granter. The documents thus privileged are, i.e., Regularly executed contracts, containing a clause authorizing such registration for execution, like the warrant of attorney in England. 2d, Bills and promissory notes properly framed and duly negotiated. The former of these qualifications requires accurate attention to stamp, designation of parties, sum, and place of payment; the latter comprehends presentment, notice of dishonour, and proper noting and protest. To authorize summary diligence, the protest, if for non-acceptance, must be registered within six months after the date of the bill; if for non-payment, within six months after the date of the bill; if for non-payment, within six months after the day of payment.

DIMITY (Fr. Busin. 1t. Dobletto), a cotton stuff, similar in fabric to fustian, from which it differs chiefly in having ornaments woven in it, and in not being dyed. Its colour should be delicately white. In the weaving, longitudinal stripes are usually raised just above the surface of the piece, and dimities are called single corded, or broad striped, according to the flatness and breadth of these stripes.

orded, or broad striped, according to the flatness and breadth of these stripes.

DISCOUNT is a premium paid for ready money, when, by agreement or the usages of trade, it is understood that credit is given. A bill or note is said to be discounted, when a third party, in respect of the credit of the names on it, agrees to pay its contents to the holder before it becomes due, deducting the interest, and, in some cases, commission for trouble and expense. There are certain penalties and disclusive the surface of the property of the proper to pay its convents to the noticer before it becomes due, deducting the interest, and, in some cases, commission for trouble and expense. There are certain penalties and disabilities levelled by the usury laws against pecuniary accommodations on which more than five per cent. of interest is taken [USURY], which still, though to a very limited extent, apply to bills of exchange. A person discounting a bill, if he deduct interest at 5 per cent., receives, as shown below, more than 5 per cent. interest on the accommodation. But it has been the practice, not only to allow discounters of bills to receive more than the 5 per cent. interest in this form, but likewise to allow a small additional sum in name of commission and expenses. The amount has been held matter of inquiry by a jury. 4th per cent. appears to be the general allowance. 7s. 6d. per cent. has been found usurious where no expense or considerable trouble has been occasioned; but in cases of long and complicated accounts, 10s. per cent. has been allowed (Chitty on Bills, 99-104). At the renewal of the bank-charter (3 & 4 Wm IV. c. 98), bills at three months were exempted from the usury laws. The privilege was extended by 7 Wm. IV. and 1 Vict. c. 80, which enacted that, till 1st January 1840, bills and notes at not more than twelve months, or having no more than that period to run, should not be null, and should not subject parties to liabilities, by reason of interest charged in negotiating them. The enactment was continued to 1st January 1842 by 2 & 3 Vict. c. 37. Vict. c. 37.

DISCOURT in Arithmetic is the difference between a sum of money due at a future period, and its present value; and the rule for finding it is this:—As the amount of £100, increased by its interest at the rate and for the time given, is to the given sum or debt, so is the interest of £100, at the rate and for the time given, to the discount of the debt. Thus, to find the discount of £100 for one year at 5 per cent. we have—

£105 : £100 : : £5 : £4:15:24

which is 4a 9id. less than the interest for the same time; the difference being in all cases equal to the interest on the discount for the given time.

Hence the rule adopted by bankers and others in charging discount is not arithmetically correct; for as the true value of the discount is equal to the difference between the sum due and its present worth, it is equal only to the interest of that present worth, instead of the interest on the whole debt. [Interest.]

DITTO, a term derived from the Italian word detto (that which has been said), and used in accounts to avoid repetition. It is commonly abbreviated into Do. DIVIDEND, that portion of any joint profit or fund which is given out to be shared or divided. It is usually expressed at so much per cent. or per pound

DIVIDEND, in Bankruptcy, is used to express the proportion (generally rated at so much per £1) of a creditor's debt, which he receives from the bankrupt estate. In England and Irrland, the first dividend is declared at a meeting called and

and registry and registry, she are dividend is declared at a meeting called and advertised by the commissioners, not less than four or more than twelve months from the issuing of the flat of bankruptcy. The second dividend is declared at a similar meeting within 18 months after the flat. [Bankruptcy.]

In Scotland, the first dividend is declared within 14 days after the expiry of

In Scotland, the first dividend is declared within 14 days after the expiry of six months from the commencement of the sequestration, and paid on the expiry of eight months from the commencement. A dividend is similarly declared and paid at every interval of four months, till the estate is exhausted, or the sequestration terminated. The commissioners may postpone any dividend till the next stated period, giving notice in the Gazette. [Sequestration.]

DOCK, an artificial receptacle for shipping, the entrance of which is generally closed by gates. There are two kinds:—1st, Wet-docks, in which a uniform level of water is maintained, so that the business of loading and unloading can proceed without interruption, whilst the ships, being kept always afloat in still water, and sheltered from the effects of the tides, their hulls, rigging, and cables, are better preserved than in an open harbour or roadstead. 2d, Dry-docks or graving-docks, used for inspecting or repairing ships, for which purpose they are so contrived that the water may be admitted or excluded at pleasure, in order that a vessel can be floated in by the tide or otherwise, and that the water may run out with the fall of the tide, or be pumped out, the shutting of the gates preventing its return. In London and other ports, the wet-docks are generally surrounded by warehouses, and enclosed by walls; in this way the greatest facilities are given to the unshipping and warehousing of merchandise, while, at the same time, the vessels and their cargoes are rendered secure from depredation.

I. Docks of the Port of London.

I. Docks of the Port of London.

The commerce of London, which had been gradually increasing during the first half of the eighteenth century, outgrew in the second half the existing accommodation for shipping; and the port, at particular seasons, was often nearly blocked up by fleets of merchantmen, many of them lying at anchor in the middle of the stream, and discharging their cargoes into lighters and barges. The only dock at that time was the Greenland Basin (now the Commercial Dock), on the south side of the river, which was used only by a few vessels in the whale fishery. The warehouse accommodation too was quite insufficient. The quays were frequently covered with sugar hogsheads, piled six or eight tiers in height; while bales, barrels, boxes, and bags, were to be seen heaped together in the utmost confusion; and at the seasons when the East and West India fleets arrived, the delay, caused by the want of accommodation, was both harassing and expensive. Along with these defects, there existed an extraordinary system of pillage and depredation, carried on chiefly by lightermen, watermen, and labourers, and, in not a few instances, winked at and shared by revenue-officers, numbers of the crews, and even by the mates and captains; these again being backed by a host of publicans and receivers on shore. ceivers on shore.

These abuses led, in 1798, to the establishment of the Thames police, and about the same time to the formation of the docks; the first being the West India

Docks, for the construction of which an act was passed in 1799.

The West India Docks, situated at the "Isle of Dogs," which lies in a bend of the river between Blackwall and Limehouse, were begun in 1800, and by the end of 1802 river between Blackwall and Limehouse, were begun in 1800, and by the end of 1802 were sufficiently advanced for vessels unloading. The entire ground occupied by them is about 295 acres; and the extent of the water area is upwards of 60 acres, capable of containing 500 large merchantmen. There are two large docks; the north or import dock, used for discharging vessels, having an area of 30 acres, and the south or export dock, for loading them, having an area of 25 acres. These lie parallel to each other, and are divided by a range of warehouse. There are besides two entrance basins, one at Blackwall, 5 acres; the other at Limehouse, 2 acres in extent; in addition to which, the Company have purchased the canal cut by the city across the Isle of Dogs, and converted it into a dock for wood-laden vessels. There has been at one time in these docks, on the quays, under the sheds, and in the warehouses, colonial produce amounting to the value of £20,000,000. The capital of the joint-stock company by whom they were constructed is £1,380,000; and the speculation has been an exceedingly successful one. Formerly, all vessels engaged in the West India trade were compelled, by the charter granted to the

and the speculation has been an exceedingly successful one. Formerly, all vessels engaged in the West India trade were compelled, by the charter granted to the Company, to unload in these docks; but this regulation is no longer in force.

The London Docks, begun in 1801, and opened in 1805, are situated at Wapping. They consist of a western dock of 20 acres extent, a tobacco dock of about 1 acre, and an eastern dock of seven acres; the whole, with the warehouses and other erections, forming a magnificent establishment covering 71 acres, and affording accommodation for about 800 ships. The tobacco warehouse covers nearly 5 acres, and can hold 24,000 hhds. There is also cellarage for nearly 70,000 pipes of wine; one of the vaults having an area of seven acres. The capital stock of the Company is

£3,238,310, 5s. 10d.; besides which £700,000 were raised by the issue of bonds,

bearing 4 per cent. interest.

The East India Docks, situated at Blackwall, below the entrance to the West India ones, consist of an import dock, of the area of 18 acres, and an export dock, having an area of 9 acres; besides which there is an entrance basin, common to both, of 3 acres. They were originally formed for the accommodation of ships in the East India trade, but they are now open to vessels from all parts. Capital

stock, £623,334, 10s. 11d.

The Commercial Dock, composed in part of the old "Greenland Basin," is situated at Rotherhithe, and occupies altogether 49 acres, about 4-5ths of which are water. It is chiefly used by vessels in the corn and timber trades. Capital stock, £313,250; besides which, £27,600 were raised by the issue of bonds, bearing

stock, £313,250; besides which, £21,000 were raised by the issue of folius, bearing interest at 4 per cent.

The East Country Dock, constructed in 1807, has an area of about 63 acres. It adjoins the Commercial Dock to the south; and is chiefly frequented by vessels employed in the European timber-trade. Capital stock, £103,800.

St Catherine's Docks, lying immediately below the Tower, are those nearest to the city. They were begun in May 1827, and partially opened in October 1828, and consist of two basins, each capable of receiving vessels of 800 tons burden. They afford accommodation for about 150 or 160 shins, besides small-craft; and cover an anord accommodation for about 150 or 160 ships, besides small-craft; and cover an area of 11½ acres; but the whole space, including that occupied by quays and warehouses, is about 24 acres. These docks are frequented by vessels in the East India and North and South American trades; and the warehouses are so arranged that goods are taken into them at once from the ship. The depth of water at spring tides is 28 feet in the lock; and thus ships of 600 and 800 tons can come up the river with a certainty of admission; the arrangements also admit of the vessels being docked and undocked by night as well as by day. Capital stock, £1,352,800; besides which, the Company have raised, by the issue of bonds, £200,000 at 4 per cent., and £500,000 at 4 per cent.

The Grand Surrey Canal Dock is a basin at the entrance of the Surrey Canal at Rotherhithe. There is also the Resent's Canal Dock. afford accommodation for about 150 or 160 ships, besides small-craft; and cover an

Rotherhithe. There is also the Regent's Canal Dock.

II. THE LIVERPOOL DOCKS.

The first commercial wet-dock made in England was formed in 1708 at this port, then a place of no consideration. It was called the "Old Dock," but having been filled up, its site is now occupied by the custom-house. A second was constructed about the middle of last century. Additions were afterwards made at various periods, and the docks of Liverpool now form an immense range, extending about two and a half miles along the eastern bank of the river Mersey. These have

two and a half miles along the eastern bank of the river Mersey. These have been constructed on a scale of extraordinary magnificence, and form one of those characteristics of commercial greatness for which this town is unrivalled.

The aggregate water area of the docks is nearly 100 acres; and the quay space extends in length about 7½ miles. The whole, excepting the work called the "Duke's Dock," in possession of the Duke of Bridgewater's executors, is the property of the corporation of the town, to which they have proved a great source of wealth, having yielded a very large revenue in proportion to the money expended on their construction. This has arisen partly from their never having had to make any outlay for the purchase of land, partly from their having avoided the expense of building warehouses, but chiefly from the labour of excavating being in a great measure saved, owing to their area having been enclosed from the river.

TABLE SHOWING THE WATER ARBA AND LENGTH OF QUAY SPACE OF THE

TABLE SHOWING THE WATER AREA AND LENGTH OF QUAY SPACE OF THE LIVERPOOL DOCKS.

	Water area.	Quay length.		Water area.	Quay length.
I. Wet Docks. Clarence dock and lock Half-tide basin Waterloo dock and lock	17,605	Yards. 914 596 1,019	I. Wet Docks. Union dock		Yarda. 483 572
Trafalgar do	33,649 29,083 57,129	1,050 839 1,613	II. Dry Basins. Prince's basin.		13,048 509 188
George's do Canning do Salthouse do King's do	19,095 23,025	500	Seacombe do	1.344	455 160 447
Queen's do Half-tide do. Brunswick do.	51,502 13,185	1.955	Queen's basin. S. Ferry do	24,39≀	601 205 2,565

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The Clarence, Trafalgar, and Coburg Docks are appropriated to the accommodation of steamers, the last being exclusively for the use of the Transatlantic and Mediterranean vessels.

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The following is a statement of the number of vessels by which the docks nave been frequented in different years, taken at intervals, and their aggregate tonnage; also the amount of dues collected thereon, and on the goods loaded and un-loaded from the same. The progressive increase which it exhibits in the trade of Liverpool since the middle of last century, is, we believe, unexampled in the history of commerce :-

Years.	Vessels.	Tonnage.	Dues.	Years.	Vessela	Tonnage	Dues.
1759			£1,776	1810	6,729	734,391	£65,782
1760	1,245		2,330	1815	6,440	709,849	76,915
1770	2,073	l	4,143	1820	7,276	805,033	94,413
1780	2,961	l	3,528	1825	10,837	1,223,820	128,692
1790	4,223		10,037	1830	11,214	1,411,964	151,330
1800	4,746	450,060	23,390	1835	13,941	1,768,426	217,836
1805	4,618	463,482	33,365	1840	15,998	2,445,708	197,478

The dock-dues are now extremely moderate, a great reduction having taken place in the year 1836.

By an act passed in 1825, the management of the docks is vested in a committee of 21 members, of whom 13 are appointed by the corporation, and 8 are elected from their own body by those merchants who pay each not less than £10 a-year

III. DOCKS AT OTHER PORTS OF THE UNITED KINGDOM.

The docks at the other ports, though much inferior in point of extent to those of London and Liverpool, are still works of great national importance. The principal are those of Bristol, Hull, and Goole, Leith, and Dundee.

The Bristol wet-dock is of a character different from those of London and Liverpool, being formed by digging a new course for the river Avon south of the city, and converting the whole of the old channel into one floating harbour, about 3 miles in length. It was commenced in 1804, and opened in 1809. The quays enclose one end of the city, and form 3 sides of a parallelogram; and there are two basins for the temporary accommodation of vessels entering or quitting the harbour. The estimated expense of the dock was £300,000, but its actual cost was about £600,000. estimated expense of the dock was £300,000, but its actual cost was about £200,000. It was constructed by a company whose present capital consists of 2209 shares of £147 each; besides which a debt was contracted of £268,342, bearing interest at 5 per cent. The maximum dividend which the company are permitted to draw is 8 per cent., but it has seldom exceeded 2 per cent. The management is vested in 27 directors, of whom 9 are chosen by the proprietors, 9 by the ancient guild of merchant venturers, and 9 by the corporation of the city, in whom the dock is vested after payment of the debt and capital.

Hull possesses 3 wet-docks, which occurs the site of its ancient fortifications:

vested after payment of the debt and capital.

Hull possesses 3 wet-docks, which occupy the site of its ancient fortifications; the Old Dock, formed in 1775; the Humber Dock, begun in 1807; and the Junction Dock, connecting the two preceding, which was commenced in 1826, and completed in 1829. The area of the quays is 15,643 sq. yds.; the locks are 120 feet long, 36 feet broad, and 25 deep; and the whole water area of the three is about 26 acres, affording accommodation for 300 vessels; but this being insufficient for the investigation of the strength of the past farther works are in contemplation.

is about 26 acres, affording accommodation for 300 vessels; but this being insufficient for the increasing trade of the port, farther works are in contemplation. Attached to the Humber Dock, which is situated at the west part of the town, is a capacious basin with its piers. At Goole, a new port, situated near the junction of the Ouse with the Humber, about 22 miles more inland than Hull, there are two wet-docks, one adapted for sea-going vessels of considerable burden, the other for the small-craft which navigate the rivers and canals.

Leith has two wet-docks, one opened in 1806, the other in 1817, each of which is about 300 feet wide, and between 700 and 800 feet long; their joint water area is about 10 acres, and they are capable of accommodating nearly 150 vessels of the size which usually enter the port. Such as draw 17 feet water can be admitted at spring-tides, but at other times the depth of the dock-sill is seldom above 14 feet. They are surrounded by well-constructed quays, upon which are erected appropriate warehouses; and there are two commodious dry-docks, for the building and repairing of ships. The whole cost of the docks was £268,993, mainly appropriate warenouses; and there are two commonous ary-uccas, for an emuling and repairing of ships. The whole cost of the docks was £268,993, mainly consisting of advances by government, to whom £223,874 still remains due; though, by a late arrangement (1 & 2 Vict. c. 55), they have allowed £125,000 to be raised, and preferably secured over the dues, for the erection of additional

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works. Besides these two wet-docks, Leith possesses a tide-harbour or basin. The works. Beendes these two wet-nocks, Lette possesses a nuc-narrour or basis. The management of the whole is vested in 11 commissioners, of whom 5 are appointed by the Treasury, 3 by the town-council of Leith, and 3 by the town-council of Edinburgh. The port-dues annually levied on vessels and goods amount to £21,000: but the total revenue of the commissioners, including warehouse-feus,

£21,000: but the total revenue of the commissioners, including warehouse-feus, rents, and ballast-dues, is about £26,500.

Dundes possesses at present two wet-docks, King William's, of 6½, and Earl Grey's, of 5½ acres. The breadth of the lock of the former (to which is attached a graving-dock) is 40 feet; of the latter 55 feet, being made of this width to admit steamers. Connected with these two docks, there is a tide-harbour, of 4½ acres. A third wet-dock, of 14½ acres, is now nearly finished, the lock of which is 60 feet; and the harbour plan embraces another of 9½ acres, with a tide-harbour between the two latter, of 11 acres in extent. The debt created on account of these works amounted, at 30th May 1840, to £230,194. The management of the whole is vested in a parliamentary commission: and the annual agement of the whole is vested in a parliamentary commission; and the annual amount of their revenue is about £16,700.

The great public dockyards of this kingdom are situated at Chatham, Devonport, Portsmouth, and Plymouth, but a description of these magnificent arsenals does not fall within our plan. They mostly contain grand basins, in which vessels are received with all their standing and running rigging; building-slips, docks for repairing, rope-house, anchor-wharfs, an anchor-forge, a copper-sheathing foundery and mills; block, mast, sail and rigging, and other storehouses,—in a word, all that is requisite for the construction, equipment, armament, and refitting of ships of war. [Porr.]

DOCKET, in English Law, signifies a brief in writing. In trade the term is often applied to a short certificate, summary, or memorandum.

DOCKET in the Bankruptoy Law of England. When the petitioning creditor lodges in the Bankruptoy Law of England. When the petitioning creditor lodges in the Bankrupt Office his affidavit of the debt, the act of bankruptcy, and his bond undertaking to pursue the bankruptcy, entry is made in a book called the "Docket Book," and the petitioner is said to have thereby "struck a docket." [Bankruptcy.]

the "Docket Book," and the petitioner is said to have thereby "struck a docket." [Bankkuppet.]
DOG, a well-known quadruped (Canis vulgaris, Linn.) varying greatly in stature, form, colour, and the quality of the hair. Its period of gestation is 63 days, and the whelps, which often amount to 8 or 9, are born blind, and do not see till after the lapse of 10 or 11 days. The growth of the animal is complete at two years; at the expiration of δ years it is considered old, and the limits of its existence rarely exceed twenty years. No trace of the dog is to be found in a primitive state of nature; and its parent stock is by many supposed to be the jackal or wolf, particularly the last, to which in many respects it has a strong affinity. "The dog exhibits," says Cuvier, "the most singular, the most complete, and the most useful conquest that man has made. The whole species is become our property; each individual is entirely devoted to his master, adopts his manners, distinguishes and defends his property, and remains attached to him even unto death; and all this springs, not from mere necessity, not from constraint, but simply from reconnaissprings, not from mere necessity, not from constraint, but simply from reconnais-sance and a true friendship. The swiftness, the strength, and the highly developed power of smelling of the dog, have made him a powerful ally of man against the other animals, and were perhaps necessary to the establishment of society. It is the only animal that has followed man over all the earth." This account, however, applies solely to the animal as it exists in Europe and America. By Mohammedans and Hindons it is regarded as impure and register will touch one without an and Hindoos it is regarded as impure, and neither will touch one without an ablution; they are, therefore, unappropriated, and prowl about the towns and villages, devouring the offal, thus performing the office of scavengers. In China, Cochin-China, the Society Islands, and other places, it is used as food, and puppies are considered a great delicacy.

The following is a list of the duties payable on dogs in this country, under the 16 and 17 Vict. c. 92. For every dog, of whatever description or denomination, the same may be, twelve shillings per ansum. The said duty to be paid by the person keeping any dog, or having the same in his custody or possession, whether the same he his property or not, such person not discovering the owner thereof who shall have been duly assessed for the same.

Provided always, that no person shall be chargeable with duty to any greater amount than £39.12a for any number of hounds, or £9 for any number of greyhounds, kept by him in any year.

EXEMPTION.—Any dog kept and used in the care of sheep or cattle, or in driving or removing the same; provided no such dog shall be a greyhound, hound, pointer, setting dog, spaniel, lurcher, or terrier.

DOGGER, a kind of vessel used by the Dutch in their fishings, which is similar in form to the Gallior; some have but one mast, others two.

DOLLAR, the most common silver coin in the world, and particularly in the western hemisphere, throughout the greater part of which it is likewise the integer of account. It is coined in various states, but the general type of the whole is the Spanish dollar, which is minted at the rate of 8½ to the Castilian mark (= 3550½ troy grains) of silver, of the fineness of 10½ dineros, that is 10½ parts fine out of 12. It accordingly weighs 417.70 troy grains, and contains 374.19 troy grains of pure silver; and, reckoning British standard silver at 5s. per ounce, is worth, when of full weight, 4s. 2½d. sterling; but its more general value, as deduced from assays, is 4s. 2d., the rate assigned to it in the proclamation issued by our government on 21st September 1838, for regulating its circulation in the West Indies. This coin is sometimes called the "hard dollar" (peso dure or fuerte); and the term "pillar dollar" is frequently applied to the pieces coined in Mexico since 1772, from their being impressed on one side with the arms of Spain placed between two pillars. The dollar is still minted at the rate of 3½ to the mark, in all the Spanish-American republics, except the Colombian. That of the United States is of nearly the same value, 4s. 2½d., containing 371½ grains of pure silver. The German and Italian dollars are in value rather less.

The dollar, being the shape generally communicated to silver in the mining

The dollar, being the shape generally communicated to silver in the mining countries, is one of the commonest forms in which that metal occurs in the markets of the world as bullion; and hence its almost universal circulation. But although nearly all the American dollars are of the same intrinsic value, they are not accounted as such in trade, a higher rate being generally given for the Spanish or pillar dollar, from its being that best known, and most readily taken by traders in semi-barbarous countries. Thus at Canton, where the circulating medium consists almost entirely of dollars, none but the Spanish or pillar dollar is received by the Chinese merchants.

In several of the South American States the dollar of account is, in their internal trade, reckoned in small base coins; in others, as in Buenos Ayres, it is of still less

value, from being estimated in depreciated paper.

DOMETT, a thin kind of flannel, of which only the weft is wool, the warp being composed of cotton. It is chiefly used by the poorer classes; also for shrouds and

the lining of coffins.

the ining of coffins.

DOONCHA, an Indian plant (*Eschynomene cannabina*) cultivated in Bengal on account of its fibres, which, though coarse, are much employed there in making cable-ropes. These are generally used in India for the drag-ropes of fishing-nets, but they appear to be of too perishable a nature for the rigging of ships.

DOUBLOON, the most common Spanish and American gold coin. It is of the same weight as the Dollar, being minted at the rate of 3½ to the Castilian mark, 21 carats fine. It therefore weighs 41770 troy grains, of which 36549 grains are pure; and its value, when of full weight (estimating British standard gold at 43.178.1044, per or.), is £3.4s. 34d.; but its more general value, as deduced from £3, 17s. 10½d. per oz.), is £3, 4s. 8½d.; but its more general value, as deduced from assays, is only £3, 4s. 1d., or £3, 4s. The latter is the rate assigned to it in the proclamation issued by our government on 21st September 1838, for regulating its circulation in the West Indies. There are also half and quarter doubloons of proportional value. This coin being the form generally given to gold in the mining countries of S. America, is, like the dollar, extensively circulated as bullion.

DOWLAS, a coarse linen fabric.

DOWN, the soft fine feathers from the breasts of birds, particularly of the duck kind. The most valuable is eider-down. It is plucked by eider-ducks from their breasts, in order to line their nests; and is generally obtained by the plunder of these nests. The quantity afforded by one female during the period of laying is stated to be half a pound, after being cleansed. Its lightness and elasticity are said to be such, that 2 or 3 lbs. of it, squeezed into a ball which may be held in the hand, will swell out so as to fill a case large enough for the foot covering of a bed. Large quantities of eider-down are collected in the Danish colonies in Iceland and Greenland, and sent to Copenhagen, from whence it is exported. It is also gathered on the coast of Norway, and some parts of Sweden. According to Captain James Ross, much of what is called eider-down is obtained from the ring-duck; it is,

however, equally good.

DOW, on DAU, a kind of vessel navigated by Arabs, which is met with all over the Indian Ocean. It varies in size from 5 to about 350 tons, and is extremely sharp at the bow, the deck being at least one-third longer than the keel. The planks in the smaller ones are sewed together with coir-rope; the seams are calked with cocoa-nut husks; and the bottom is covered with a composition consisting of lime and oil or tallow, which hardens under water, and protects the

wood from marine worms. They have a single mast, stepped a little ahead of the centre, and raking forward, upon which is set a coarse square-sail. They have an open poop on the stern; the rudder is very large, and often secured by ropes only. DRAB, a woollen fabric, generally woven thick and double milled, being chiefly

used for greatcoats.

DRACHMA, DRACHM, on DRAM, an ancient Greek weight, equivalent, according to Paucton, to 69 troy grains; also the principal silver coin, and money of account, of the new kingdom of Greece, where its weight is that just mentioned,

and its value about 3\frac{3}{2}, sterling.

In the British system the term dram is applied to two weights,—in apothecary's weight to the one-eighth part of the troy ounce, or 60 troy grains; and to the one-sixteenth of the avoirdupois ounce, or 27 1/2 troy grains; the latter, however, is seldom used.

DRAFF, or DRAFT, a small commercial allowance or deduction, now nearly obsolete. [Tares.]
DRAFT, a term sometimes applied to a bill of exchange or bend about

DRAFT, a term sometimes applied to a bill of exchange or bank-cheque.
DRAGON'S BLOOD, (Fr. Sang-dragon. Ger. Drachenbluth. Hind. Heraduky. Palembang, Jaremang,) a peculiar resinous colouring principle mixed with benzoic acid and other matters, is a dark red, inodorous, and insipid substance, obtained from the surface of the ripe fruit of several species of palm (Calamus) indigenous to Hindostan, Cochin-China, and the Eastern Islands, especially Sumatra, at the towns of Jambi and Palembang, in which, and at Banjarmassin in Borneo, this resin is principally obtained. It is exported in considerable quantities to China and India; also to Europe, to which it is sent in the form of drops or tears,—of grains,—and of reeds or rods from 12 to 18 inches long, about the thickness of the finger, covered with the fronds of the palm wrapped round it with split branches. the last is the best. Other kinds are procured in India, Madeira, and near Carthagens in S. America; these chiefly occur in masses of a violet colour, and are derived from other trees besides that already mentioned, mostly the Dracana Draco,

and the Pterocarpus Draco, (Linn.); while a spurious sort is often made with colophony, olibanum, turpentine, and gum-senegal, dyed with various substances. The resin is employed as a colouring matter, an ingredient in varnishes, and in the composition of tooth-powders; it is now seldom used as a medicine.

DRAWBACK, a term used in reference to those duties of customs or excise which are repaid by government on the exportation of the commodities on which they were levied. This repsyment is made to enable the exporter to sell his goods in the foreign market unburdened with duties. An account of the laws and official rules affecting drawbacks will be found under the heads Cusrows Rague arrows and rules affecting drawbacks will be found under the heads Customs REGULATIONS and

DRAWER AND DRAWEE, in the law of bills of exchange. The former is the person from whom the direction to pay emanates: the latter is the person whom he directs to pay, or on whom he draws. The expression drawee is correctly applicable only between drawing and acceptance. The drawer's name must appear upon the bill, either in the body of it or at the end; and his liability as a party to the bill is completed by delivery to a payee. A drawer, like an acceptor, is responsible for what sums may be filled into blanks in stamps to which he puts his name. A drawer against whom recourse is to be preserved, ought to have notice of non-acceptance or non-payment. In accommodation bills, notice is not requisite, and a drawer may, by his own act, dispense with notice, as, where he has said he will call on the acceptor, and see if a bill has been paid (Chipsen v. Kneller, 4 Camp. 285). The drawer is liable to a person paying supra protest. (Bayley. Chitty.)

[Bill of Exchange Norice.]

DRUGGET, a slight stuff sometimes made of wool, sometimes half of wool and half of thread, corded or plain, generally the last. It is manufactured chiefly in

Devonshire.

Devonshire.

DRY-ROT, a disease affecting timber, particularly the oak, employed in ship-building. It is generally produced by fungi; and it is said that any of those that are commonly found upon decaying trees are capable of producing the disease. The circumstances that are most favourable to the development of the dry-rot fungi are damp unventilated situations, and a subsaid state of the wood; the last being easily produced, especially in oak, by a slight fermentation of the sap which remains in the timber, especially if the latter has not been well seasoned before being wrought. The first sign of the evil is the appearance of small white points, from which a net-like substance radiates parallel with the surface of the timber; the former being the first stage of growth of the seeds in the fungus, the latter

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their thallus or spawn. These last gathering strength thrust asunder the tubes from which the wood is organized, and completely destroy the cohesion of the tissue; and the total ruin of the timber speedily ensues where circumstances are favourable to the growth of the fungi. The prevention and cure of dry-rot is of great importance in reference to our shipping; and various joint-stock companies have been formed for the purpose of subjecting timber to preventive solutions. According to Mr Kyan, timber steeped in a solution of corrosive sublimate cannot become a prey to dry-rot, so far as that disease is produced by a fungus.

DUBBER, a kind of vessel or jar made of thin untanned goat-skin, which is generally used in India to contain oil, ghee, and other liquids. Dubbers are of almost every variety of size.

almost every variety of size.

DUCAPE, a plain wove stout silken fabric of softer texture than gros de Naples. DUCAT, a gold coin common on the Continent, especially in Germany, the general value of which is about 9s. 4d. The Neapolitan ducat, however, is a silver coin worth only 3s. 33d.

DUCK. [Pourray.]
DUNNAGE, a name given to the pieces of loose wood placed on the bottom and sides of a ship's hold, either to support the cargo, so that the vessel may be properly ballasted, or to prevent injury from leakage.
DUTCH-LEAF, a brass substance used for making trinkets.

DUTCH DUSH OR HORSE-TAIL, a hollow-stemmed leafless plant (Equisions)

DUTCH-ELEAT, a relative terminal strikes of the strike of the strikes of the stri makes it useful for polishing wood and metal, a purpose for which it is extensively used. It is generally imported from Holland.

DUTY, a general name for a tax or impost.

DYE-STUFFS. An account of these will be found under their appropriate heads. See also the article COLOUR TRADE.

EAGLE, the principal gold coin of the United States, weighs 258 troy grains, 9-10ths fine, and contains 232½ grains pure; and, estimating British standard gold 11-12ths fine at £3, 17s. 10½d, per ounce, is equal £2, 1s. 1½d, sterling nearly. The half-eagle, the most common gold coin of the States, is of proportional value. The eagle is a logal tender for 10 dollars; hence, the value of the dollar of account, reckoned in cold is 4s 11d stayling nearly.

the most common gold coin of the States, is of proportional value. The eagle is a legal tender for 10 dollars; hence, the value of the dollar of account, reckoned in gold, is 4s. 14d. sterling nearly.

The preceding is the value of the eagle according to the act of Congress of June 38, 1834, as modified by the subsequent act of Jannary 18, 1837. As the former of these acts, however, produced an alteration which has exercised an important influence over the monetary affairs of the Union, it will be proper to explain shortly its nature and effect.

According to an act of Congress of April 2, 1793, the weight of the eagle (of 10 dollars), was fixed at 370 troy grains, and its contents in pure gold at 3473 grains; the weight of the dollar at 16 grains, and its contents in pure gilver at 3714 grains. The weight of pure gold in the eagle was thus precisely 2-3ds of that of silver in the dollar, and the relative value of gold to silver was therefore as 16 to 1. This being, at least after the resumption of specie payments by the Bank of England in 1819, an undervaluation of gold in respect to silver, all payments were made in the latter, in which the value of the dollar of account, equal to that of the coin, was 4a. 24d. sterling.

But the act of June 23, 1834, reversed this system, by reducing the amount of pure gold in the eagle to 232 grains, while it was still preserved as a legal tender for 10 dollars. No alteration having been made on the silver coin, the relative value of gold to silver became then nearly as 16 to 1, in place of 154 or 154 to 1, its true proportion. This was an undervaluation of silver which the value of the dollar of account was 1-10th of the new eagle, or only 4a. 14d. sterling.

Under the act of January 18, 1837, the quantity of alloy in both the gold and silver come was adjusted at the 1-10th part, but no change was made on their value, farther than a small fractional addition of pure metal to the gold coin, amounting in the eagle to only 4th of a grain.

The practical effect, therefore, of

tion of wages as earnest. By the statute of frauds (29 Ch. II. c. 3, § 17), no contract for the sale of goods or merchandise in England to the extent of £10 is good without a written memorandum, unless the buyer receive part of the goods, or give something in earnest or part payment.

EARTHENWARE, a term generally applied to all utensils composed of earthen materials. In reference to chemical constitution, there are two kinds: Porcelain, consisting of a fusible earthy mixture, along with an infusible, which, when combined, are susceptible of becoming semi-vitrified and translucent in the kiln; and Pottery, an infusible mixture of earths, which is refractory in the kiln, and continues que. The latter comprehends several sub-species, which graduate imperceptiopaque. The latter comprehends several sub-species, which grands of input opportunities by into each other, as stoneware, earthenware proper, flintware, fayence, delfi-ware, and ironstone china. The term pottery, however, is sometimes applied distinctively to the brown stoneware, made into jugs and other articles, porous ves-

sels, and the red pans and pots in common use.

The formation of earthen vessels is an art of the very highest antiquity; and it is one which probably was carried to greater perfection than any other of the manufactures of the ancient world. It is also one which has been found in the manufactures of the ancient world. It is also one which has been found in a considerable degree of forwardness in all newly discovered countries possessing the raw material,—even among people comparatively rude and unacquainted with most of the other arts which conduce to human convenience. In China, it was carried to very nearly the degree of excellence which their porcelain now exhibits many centuries before it was practised with much skill in Europe. From Asia it was brought to Greece, especially Corinth, the potters of which displayed such exquisite taste and skill, that their works were amongst the most valuable decorations in the dwellings of princes. The Greeks introduced their improvements into Exypt; and a Phosnician colony is supposed to have founded the ancient Expute. Egypt; and a Phoenician colony is supposed to have founded the ancient Etruria, whence modern Europe has drawn models of skill and beauty.

The Romans improved the art of pottery in this and many of the other countries

which they conquered; but the manufacture, nevertheless, continued stationary until a comparatively recent period, and the wealthy were supplied with porcelain almost exclusively from China. At length, however, the royal establishments of Sevres, Dresden, and Berlin, produced wares which became the admiration of Europe;

Sèvres, Dresden, and Berlin, produced wares which became the admiration of Europe; yet they never circulated throughout all ranks, nor effected any general change in domestic life, being limited to the use only of the noble and the rich.

In England, the manufacture of earthenware has been established from the remotest period of history, particularly in Staffordshire, where indeed the Romans are said to have had potteries; but until the beginning of the eighteenth century, it was confined to a few objects of the commonest description. In 1690, various improvements were introduced by two brothers, named Elers, who came from Nuremberg; and about 30 years later, a person called Astbury first made white stoneware, by the adoption of calcined fiints in its composition. This step was of consequence in preparing the way for the far greater advances afterwards (1760) accomplished by Mr Josiah Wedgwood (born 1750, died 1795), by whose discoveries and exertions the wares of Staffordshire were not only brought into general use in this country, to the exclusion of all foreign goods, but English into general use in this country, to the exclusion of all foreign goods, but English pottery has since been sought for throughout the civilized world, and adopted even in places where the art was formerly prosecuted. "Its excellent workmanship, its solidity, the advantage which it possesses of sustaining the action of fire, its fine glaze impenetrable to acids, the beauty and convenience of its form, and the cheapness of its price, have given rise to a commerce so active and universal, that, in travelling from Paris to Petersburg, from Amsterdam to the furthest part of Sweden, and from Dunkirk to the extremity of the south of France one is served at every inn with English ware. Spain, Portugal, and Italy are supplied with it; and vessels are loaded with it for the East Indies, the West Indies, and the continent of America."

The district in Staffordshire wherein the English earthenware is chiefly manufactured, distinguished by the general appellation of "The Potteries," is situated factured, distinguished by the general appellation of "The Potteries," is situated on the borders of Cheshire, commencing at the village of Golden Hill, and extending more than seven miles to Lane End, and comprising the intermediate places of Newfield, Smithfield, Tunstall, Longport, Burslem, Cobridge, Etruria (the seat of Mr Wedgwood's establishment), Hanley, Shelton, Stoke, Lower Lane, and Lower Delf. These were all formerly distinct villages, but the increase of the manufacture has led to the erection of so many new works, that their individuality is now lost, and the whole presents the appearance of one large town. The manufacture in England, however, is far from being restricted to Staffordshire. Porcelain has long been made at Derby and at Coalport in Shropshire, while more lately it has risen to high excellence in the city of Worcester, at Rockingham, and at

^{*} Travels in England and Scotland by E. Faujas de Saint Fond, vol. i. p. 97.

Swinton near Rotherham. The Lambeth stoneware is perfect in its kind; and establishments for making the commoner sorts are to be found in many parts of the kingdom.

the kingdom.

"The better kind of pottery, called in this country Staffordshire-ware, is made of an artificial mixture of alumina and silica; the former obtained in the form of a fine clay, from Devonshire chiefly; and the latter, consisting of schist or filmt, which is heated red-hot, quenched in water, and then reduced to powder. Each material, carefully powdered and sifted, is diffused through water, mixed by measure, and brought to a due consistency by evaporation; it is then highly plastic, and formed upon the potter's wheel and lathe into various circular vessels, or moulded into other forms, which, after having been dried in a warm room, are enclosed in baked clay-cases, resembling bandboxes, and called seggars; these are ranged in the kins so analy to fill it, leaving only space enough for the fuel: here the ware is kept red-hot for a considerable time, and thus brought to the state of biscavid. This is afterwarde glazed, which is done by dipping the biscuit-ware into a tub containing a mixture of about 60 parts of litharge, 10 of clay, and 90 of ground filmt, diffused in water to a creamy consistence, and when taken out, enough adhere to the pieces are then again packed up in the aggrapars, with small bits of pottery interspersed between each, and fired in a kiln as before. The glaxing mixture fuses at a very moderate heat, and give a uniform glossy costing, which finishes the process, when it is intended for common white ware.

"The patterns upon ordinary poroelain, which are chiefly in blue, in consequence of the facility

"The patterns upon ordinary porcelain, which are chiefly in blue, in consequence of the facility of applying cobalt, are generally first printed off upon paper, which is applied to the plate or other article while in the state of biscuit; the colour adheres permanently to the surface when heat is

properly applied.

properly applied.

'I The manufacture of porcelain is a most refined branch of art; the materials are selected with the greatest caution, it being necessary that the compound should remain perfectly white after exposure to heat; it is also required that it should endure a very high temperature without fusing, and at the same time acquire a semivireous texture, and a peculiar degree of translucency and toughness. These qualities are united in some of the Oriental porcelain, or China, and is some of the old Presden, but they are rarely found on-existent in that of modern European manufacture. Some of the French and English porcelain, especially that made at S&vres and at Worcester, is extremely white, and duly translucent, but it is more apt to crack by sudden changes of temperature; more brittle, and consequently requires to be formed into thicker and heavier vessels; and more fusible than the finest porcelains of Japan and China." (Brande's Orensitry.)

The annual value of the manufacture in this converse manufacture and estimated at

The annual value of the manufacture in this country may be estimated at £2,500,000, about two-thirds of which is produced in Staffordshire; and nearly £2,500,000, about two-thirds of which is produced in Staffordshire; and nearly the whole of this large amount consists of the labour and skill bestowed on the goods, as the value of the raw material is trifling. This manufacture is besides distinguished by other peculiarities. The Potteries' district being situated in one of our most inland counties, occasions the employment of an immense quantity of inland carriage by canals and otherwise, both for the raw materials and finished goods; while every ton of the former produces several tons of merchandise for shipping, the freight being paid, not upon the weight, but according to the bulk; and scarcely a vessel leaves any of our great ports, whose lading is not in part made up of these cheap, bulky, and, for these reasons, valuable articles, to this maritime country. The total declared value of the goods annually exported is now about £700,000; but the real value is said to be about one-fourth more. Nearly one-half of these shipments is to the United States: the remainder is diffused pretty equally of these shipments is to the United States; the remainder is diffused pretty equally over all the other portions of the globe with which Great Britain has trading rela-

tions. [PORCELAIN.] S

EASTERN OR MALAYAN ISLANDS, an archipelago lying betwixt the continents of Asia and Australia, and stretching from the W. extremity of Sumatra to the island of Papua or New Guinea; nearly all of them, with the exception of to the island of Papua or New Guinea; nearly all of them, with the exception or the Philippines, being situated within 10 degrees of the equator on each side. Among them are 2 islands of the first rank and size, viz.: Borneo, and Sumatra; of the second rank, Java; of the third, Celebes, Luzon, and Mindanao; and of the fourth rank, Bali, Lombok, Sumbawa, Jindana, Flores, Timor, Ceram, Booro, Gilolo, Negros, Samar, Mindoro, Panay, Leyte, and Zebu. The smaller ones are numberless. Population vaguely estimated at 15,000,000.

numberless. Population vaguely estimated at 15,000,000.

The Eastern or Malayan Islands are the only portions of Asia situated under the equator, and, like other tropical countries, enjoy heat, moisture, and a luxuriant vagetation. They are throughout of a mountainous nature, and the principal chains volcanic. There is a general uniformity in climate and in productions; but on a closer view it is found that the western and eastern divisions possess distinct characters. In the western division, the productions are of a higher order of untility, and rice forms the principal food of the Inhabitants. The eastern is less fertile, and the inhabitants derive their chief sustenance from the pith of the sago tree. The portion of the latter, however, betwirt long: 124° and 130° E. excels in the finer spices; and in this part the character of the monsoons is reversed; the easterly monsoon being here rainy and boisterous, and the westerly, dry and temperate. There are two aboriginal races of inhabitants in the archipelago; a brown people, with lank hair, inhabiting chiefly the W. division; and a negro cae, bisack, with frizzled hair, inhabiting chiefly the E. division; the former displaying nearly the same superiority over the latter that the whites do over the negroes of Africs. The women of these islands, more especially of Java, are, on shore, almost the sole merchants and brokers, the men interfering little, particularly with retail business. The Wadjo-Buggeeses are the chief carriers of the archipelago.

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The higher departments of commerce are conducted by foreigners, mostly Chinese, Europeans or their descendants, and natives of India and Arabia. Of the Asiatic traders, the Chinese are by far the most useful, and appear to stand nearly in the same relation to the natives that the Jews did to the barbarians of Europe in the middle ages; the advantage in respect of treatment being, however, decidedly in favour of the former.

The Eastern Islands, and more especially the Moluccas, or Spice Islands, have, at different periods, been the subject of rivalry and contention among the Portuguese, Engilah, Spanish, and Dutch. The Portuguese having, by degrees, been shorn of their maritime power, and the attention of the Engilah gradually absorbed by their immense empire on the continent of India, these islands (excepting the Engilish settiements in the Stratts of Manacca), have long been occupied only by the Spanish and Dutch. The Spanish possessions are the Philippinas. The Dutch have entirely subdued Javs, the Moluccas, and some others, and hold military occupation of leading positions throughout the archipelago, over the whole of which indeed, excepting the Philippinas, hey claim a kind of sovereignty. The Dutch possessions are divided into seven governments; Resiavia with the seat of the governor-general, and Sumatra, Amboyna, Banda, Tarmate, Macasam, and Timor. During the last war, the British deprived the Dutch of Java and their other principal settlements, but them are remarked to the seat of the Strates, which are remarked to the seat of the governor-general, and Sumatra, Amboyna, Banda, Tarmate, Macasam, and Timor. During the last war, as an experience at the seat of the Malay Bencocle and acceptance of the British, was estimated at 184, 816 cunces, or £688,176. It is most situation of the Strike, has an extending improved, and its retoration has ever become and acceptance of the seat of the seat of the Malay peninsula, was estimated at 184, 816 cunces, or £688,176. It is most abundant in Borneo, the

Delt, Amanan, Dacoungam, Ampparatory, Tulang Bawang.

Bornso. Dutch Toions.—Sambass, Pontiana. Native Toions.—Borneo, Montradok, Mampawa, Banjarmassin, Pasir Town.

CELERES. Macassar, Kema, Gounong Tela, Bool, Palos, Waja Tannste, Mero, Boola,

SOOLOO ISLANDS, Sooloo

MOLUCCA, OR SPICE ISLAWDS; Ceram, Amboyna, Banda, Ternate, Goram, Gilolo, Tidora. Principal Dutch Town.—Amboyna, in the island of that name. The excipate chiefly employed throughout the Eastern Islands are those of China. The currency used by merchants is commonly the Spanish dollar, but in Java the Netherlands florin.

d political condition of the inhabitants of the Rac The moral and pointed conductor or the minaturate or the Eastern Islands has been much de-teriorated by the evil effects of European influence as exercised by the Dutch; and by their continued turbulence, owing to the defective power of the sovereign, the ill-defined succession to the throne, the universal prevalence of piracy, and the inefficient protection of commerce and consequent monopoly of trade by the petty chiefs, with all their arbitrary dues and extortions.

EAST INDIA COMPANY, an association originally formed for the sole purpose of trading to Hindostan and the neighbouring regions; but who, by a peculiar combination of circumstances, have established themselves as the sovereigns of an immense empire, extending over the principal part of those countries, and containing upwards of 100 millions of people.

From the first dawn of maritime enterprise in Britain the trade of India was contemplated as its grandest object. Into the sanguine conceptions formed on this subject there entered, no doubt, a considerable degree of illusion. Yet there were circumstances which, even at that early stage of mercantile adventure, threw a

peculiar lustre on the trade of India. The staple articles consisted of finer and richer fabrics than any that had yet been produced in the West; diamonds, pearls, jewels the most beautiful and brilliant; also spices the most fragrant and grateful to the sensee. The great scale, too, on which operations were conducted, and the large fortunes accumulated in certain instances, gave to this traffic a character of grandeur not belonging to the smaller transactions which took place within the limits of Britain or of Europe.

The exclusive right to the navigation to India by the Cape of Good Hope was claimed by the Portuguese, the original discoverers of the route in 1497, and then the most powerful maritime state. This claim being sanctioned by the Pope, and somewhat in unison with the laws generally admitted in that age respecting maritime discovery, the early attempts of the English to participate in the Indian trade were directed first to the exploring of a passage by the N. W. coast of Asia; and next to the opening of an intercourse with India acroes Russia and Persia; and under Willoughby, Chancellor, and others, much capital and enterprise were expended in vain on these arduous undertakings (1528, dc.). The next attempts were made by Cabot and others by the N. W. passage round the arctic shores of America; but the results were alike unsuccessful. At last Drake conceived the bold design of penetrating into the South Sea; and, having equipped a fleet, he accom-America; but the results were alike unsuccessful. At last Drake conceived the bold design of penetrating into the South Sea; and, having equipped a fleet, he accomplished a passage through the Straits of Magellan, and arrived in 1579 at the Molucas, where he first began that commerce with India which has since been carried to so great an extent. Drake's return to England in 1580 was hailed with exultation by the people; and his success encouraged Cavendish and other commanders to tread in his footsteps, while another route, projected by the Mediterranean and Persian Gulf, was accomplished by a different body of adventurers, including Newbery and Fitch, in 1584 and 1585. Meanwhile, England having risen to the first rank among maritime states, the awe inspired by the power of the Porto the first rank among maritime states, the awe inspired by the power of the Portuguese became materially lessened; and in 1591, three ships were despatched under Lancaster and others by the Cape of Good Hope. He visited Sumatra, under Lancaster and others by the Cape of Good Hope. He visited Sumatra, Penang, Ceylon, and neighbouring places, and returned in 1594; but the issue of this expedition was, upon the whole, unfortunate, and for some time chilled the ardour of the English. On learning, however, that the Dutch had sent out four vessels, they were again inspired with emulation, and an association, formed in 1599, subscribed £30,000 to be employed in fitting out three ships for the Indian trade. This body in 1600 merged into one on a grand scale, having at its head George, earl of Cumberland, with 215 knights, aldermen, and merchants, who constituted the "Governor and Company of Merchants trading to the East Indiae."

The Company received a charter for 15 years from Queen Elizabeth, and were

earl of Cumberland, with 215 knights, aldermen, and merchants, who constituted the "Governor and Company of Merchants trading to the East Indies."

The Company received a charter for 15 years from Queen Elizabeth, and were invested with the ample privileges which it was then customary to bestow on mercantile associations. They began on the footing of a joint-stock company, shough, as the subscribers were slow in paying up their shares, a certain number of the more zealous took the concern altogether into their own hands. They expended £75,373, of which £39,771 were invested in shipping, £23,742 in bullion, and £6860 in goods. It was the wish of the court that Sir E. Michelborne should be commander; but the merchants intimated their resolution not to employ gentlemen, but to sort their business with men of their own quality." They accordingly appointed Lancaster, who sailed, 2d April 1601, with five ships, varying from 150 to 600 tons; and after visiting Acheen in Sumatra, and Bantam in Java, returned in 1603. Betwixt 1603 and 1612, seven other voyages were undertaken, making in all eight expeditions, the result of which was judged, on the whole, to be prosperous. The commanders of these expeditions appear, like most of the early navigators, to have sometimes conjoined the different occupations of trade and piracy. Their principal object was to obtain pepper, cloves, nutmegs, and other spices in the Eastern Islands, their chief settlement being Bantam; and the continent of India was not visited until 1611, when Middleton reached Surat. In 1612, the Mogul allowed them to establish factories at Surat, Ahmedabad, Cambay, and Gogo. Shortly afterwards, a regular annual intercourse with India was established, chiefly at Surat; and the most valuable possessions in the Eastern Islands having been wrested from the Portuguese by the Dutch, were less visited, until at length the greater attractions of the continent induced the Company gradually to relinquish all their insular stations except a few in Sumatra. The factory a The Company's trading stations on the E. or Coromandel coast were held subordinate to Bantam until 1640, when they obtained the permission of a native chief for the erection of Fort St George at Madras; which place was formed into a presidency in 1654. The establishment in Bengal was founded somewhat later than the others. In 1656, through the influence and patriotism of a physician named Boughton, who had been professionally useful to the Nabob of Bengal, permission was obtained to erect a factory at Hoogley, on the Ganges. From this time ships were sent to Bengal every year, but its commerce was still considered secondary to that of Coromandel, and made subject to the presidency of Fort St George. Calculta was purchased in 1698; and in 1707 it was raised into a separate presidency. The Company, for some time, were little more than an associated body of private adventurers; the governor and directors merely receiving the funds contributed by each individual managing them according to his suggestion, and accounting to

The Company, for some time, were little more than an associated body of private adventurers; the governor and directors merely receiving the funds contributed by each individual, managing them according to his suggestion, and accounting to him for the proceeds. But in 1612, by representing the complexity and inconvenience arising out of this arrangement, they prevailed upon the merchants to unite into a joint-stock company, where the whole sum subscribed was placed under the control of the directors; and a dividend made, conformable to the general results of the trade. It has been alleged, however, that when zeal was no longer stimulated by individual advantage, the transactions were not conducted with the same economy, and yielded less advantageous returns. The Company afterwards involved their affairs in the confusion of different interests. An addition to their capital being from time to time required, was procured by a new joint stock, and sums were subscribed by fresh bodies of adventurers, which were to be separately managed. Thus by the year 1650, four distinct subscriptions were formed. Meantime, the directors were harassed not only by the competition of interlopers, but by demands from respectable merchants to be admitted to a share of this lucrative traffic. The principles of commercial as well as of political liberty widely pervaded the nation; the Levant and Muscovy trades had been thrown open with the happiest effects; and it was urged that equal benefits would accrue from opening to the nation; the Levant and Muscovy trades had been thrown open with the happiest effects; and it was urged that equal benefits would accrue from opening to the nation; meneral that of India. In 1635, a new association, headed by Sir W. Courten, obtained permission from the king, who was allowed a share in the adventure, to embark in an independent trade with that country. The concern, however, was not well conducted, and could not make head against the hostility of the Company. At length the privilege was withdrawn; bu

During a course of years from this date, though the Company laboured under embarrassment, the prosperity of the country enabled them to extend their commerce. Their outward investment in goods and bullion, which in 1622 did not exceed £65,000, rose in 1673 to £228,000. This apparent success produced the usual effect of exciting emulation among the rest of the community; and the project of a new joint stock was (1683) for some time entertained. The Company, notwithstanding, had still influence enough in 1698 to procure from the crown a charter for 21 years, which authorized them to extend their capital from £756,000 to £1,500,000; but the House of Commons, in the same year, passed a vote directly annualling this grant. In 1698, a bill was brought into Parliament for the establishment of another company. This measure was not, however, founded upon a liberal basis. It in no degree threw open the trade, but merely transferred the monopoly from one body to another, and a direct injustice was committed by allowing the new association to commence their operations immediately; their predecessors being by their charter entitled to a notice of three years before their exclusive trade should cease. Finally—and this was the real source of their too ample privileges—the new company agreed to advance to government £2,000,000 at 8 per cent. Their means being thereby crippled, they were only able in their first voyage to complete an investment of £178,000, while their rivals sent out one of £525,000. The old company also conducted their affairs with increased prudence; and by their great experience proved themselves superior to their new competitors. The most violent dissensions broke out in India between the rival associations, each representing the other in the blackest colours to the native princes, who were much disposed to listen to the statements of both. Hence arose an apprehension that the very existence of British

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trade in India was in peril; and a sense of mutual danger induced the companies to agree, in 1702, to a compromise, and to act themseforth under the title of "The United Company of Merchants trading to the East Indies." Godolphin was appointed arbiter, and on the basis of his decision was formed a government composed of a Court of Proprietors for general purposes, and a Court of Directors for details. Seven years were allowed for each company to wind up its affairs, at the end of which period (1708), the act 6 Anne, c. 17, was passed, prolonging their charter to 1729, and obliging the United Company to advance £1,200,000 to government without interest, which, when added to the former loan at 8 per cent., raised the amount to £3,200,000, and reduced the rate to 5 per cent. upon the whole advance. This act may be regarded as the foundation of the privileges of the present Company. Company.

Company.

The exports, in the early part of the 18th century, consisted chiefly of bullion; and the imports of Indian silks, piece goods, and other products. An intercourse with China was opened so early as the year 1635; but the trade was long prosecuted irregularly, and on a very limited scale. In 1678, the Company possessed factories at Taywan in Formosa, and at Amoy. At this period the chief imports from China were silks and porcelain, and tes did not become the principal commodity until 1706, previous to which time they had been forced to restrict their intercourse to Canton. In 1715, the intercourse with the Chinese assumed the character of a regular trade, and ships were despatched from England at stated seasons, baying each a supercarge to conduct the sales and purchases.

seasons, having each a supercargo to conduct the sales and purchases

seasons, naving each a supercarge to conduct the sales and purchases.

In 1709, the Company's dividend was 8 per cent., which was increased in 1711 to 9 per cent.; and in 1712, the charter was again extended to 1736. In 1716, the dividend was increased to 10 per cent., but reduced in 1722 to 8 per cent. In 1730, a strenuous effort was made by petitions from the chief mercantile towns to have a strenuous effort was made by petitions from the chief mercantile towns to have the Indian trade thrown open; but the Company defeated this application, and produced a further extension of their charter for 33 years, to 1769, on which occasion they gave £200,000 to the public, and agreed to reduce the interest on their debt to 4 per cent. In 1743, they advanced £1,000,000 to government at 3 per cent., and obtained an extension of their charter from 1769 to 1783. When a general reduction of the interest on the public debt took place in 1749, that of the whole debt of £4,200,000 was reduced to 3 per cent., and they were empowered to borrow, by the sale of annuities to that extent, and did borrow £2,992,440 accordingly.

accordingly.

At this time (1749), the circumstances of the Company underwent a most important change. At first they attempted nothing more than to maintain factories for the accommodation of their agents, and places of deposit for their goods. The marauding character of the native princes afterwards rendered it necessary to fortify these stations. But though some passages in the Directors' correspondence in 1689 indicate a desire to make territorial revenue one of the Company's sources of emolument, yet down to 1749 they had acquired only a few small districts around Bombay, Madras, and Calcutta. The war which then broke out in the around sombay, Madras, and Calcutta. The war which then broke out in the Carnatic had the effect of converting them into a military power, and of rendering them, after various struggles, virtual sovereigns of that part of the country. Much more memorable results arose out of the war in Bengal, and the victories of Clive, in 1757, when they obtained the Dewannee, including the real occupancy of that province, with Bahar and Orissa, forming a territory more extensive, and at that time supposed more opulent, than the whole of Great Britain. The sovereignty of these territories having been confirmed to the Company by treaty in 1755. time supposed more opulent, than the whole of Great Britain. The sovereignty of these territories having been confirmed to the Company by treaty in 1765, an extraordinary sensation was created, and both themselves and the nation became inspired with an extravagant idea of their wealth; their stock rose to 263, and a dividend was voted of 124 per cent. These treasures, however, soon became an object of jealousy and desire, both to the people and the government. The question was mooted whether any body of subjects could exercise an authority independent of the supreme power; nor were ministers slow to pronounce that the king must be the real and only sovereign over every territory conquered by the British arms. This alarming claim was, for the time, evaded by an agreement made in 1767, that the Company should annually pay £400,000 into the Exchequer, and reduce their dividend to 10 per cent.; upon which they were allowed for two years to retain their Indian acquisitions. In 1769, a similar arrangement extended their power five years longer; but at this epoch a disastrous crisis had arrived in their affairs. The revenues of the conquered provinces, though very considerable, were found inadequate to defray the expenses of the war with Hyder Ali, in which they were then engaged, and to meet the rapacity of their servants, and the exorbitant dividends which the proprietors thought themselves entitled to demand. Their affairs were now (1772) in a state of extreme embarrassment, which they in vain endeavoured to mitigate by leans from the bank, first of £400,000 (July 15), and then of £200,000 (July 29). They were under the necessity of stating to government (10th Angust 1772) their absolute want of an accommodation to the amount of £1,500,000. This application placed them entirely at the mercy of the minister, who determined, indeed, after some hesitation, to grant their request but under conditions which might promote both his the mercy of the minister, who determined, indeed, after some hesitation, to grant their request, but under conditions which might promote both his own influence and that of the crown. His terms were, that the Exchequer should lend £1,400,000 at 4 per cent., and forego the stipulated annual payment of £400,000 till that debt were discharged. In return, the Company were not to divide above 6 per cent. till that object should be accomplished; and on their extrication from difficulties, were to pay to the revenue three-fourths of their surplus receipts at home. The latter point was loudly denounced by the Directors as oppressive; but, in fact, it proved wholly nugatory, since the relief from embarrassment and the possession of a surplus were never realized. The minister followed up this measure by another still more offensive regulating their constitution, both at home and in India —in surplus were never realized. The minister followed up this measure by another still more offensive, regulating their constitution, both at home and in India,—in particular, requiring the appointment of a governor-general, with four councillors, and a chief-justice with three judges, subject to the approbation of the cabinet. The remonstrances of the Company against this measure were fruitless, and the arrangements were carried into effect by two acts passed in June 1773.

The debt to government was discharged in 1777, when the restriction on their dividends was of course removed; and in 1781, a new agreement was made, by which £400,000 were accepted by government in discharge of all former claims, and the charter extended to 1794. The dividend being at that time 8 per cent, it

and the construct extended to 1/34. The dividend being at that time 5 per cent, it was also stipulated that a certain share of the surplus profits should accrue to the public; but the state of the Company's affairs rendered the latter provision of no

Meanwhile the Directors were actively endeavouring to repress the disorders which began to appear in their Indian possessions. It was with this view chiefly that Clive went out a second time in 1765, though circumstances soon view chiefly that Clive went out a second time in 1765, though circumstances soon afterwards led also to a vast extension of their territorial property. The two primary objects of his mission were to put an end to the exaction of presents by British officers from the native powers, and to repress the internal trade, in a great measure monopolized by them, which had been the source of accumulated evils. The first of these measures he enforced with rigour. The latter, however, he is said to have partially connived at, till the repeated commands of the Directors left him no choice but to perform his duty. Affairs, nevertheless, remained in extreme disorder; and the revenue had, in no degree, answered the expectations of the Company. On the resolution being formed to appoint a governor-general, Parliament nominated Warren Hastings. The choice was entirely approved by the proprietors; and from that gentleman's splendid talents and great experience in Indian affairs, the happiest results were expected from his elevation to the suprement. His administration lasted from 1772 to 1785, and the various Indian affairs, the happiest results were expected from his elevation to the supreme government. His administration lasted from 1772 to 1785; and the various transactions by which it was marked excited in Britain a very intense interest, and gave rise, after his return, to some of the most memorable proceedings in the records of Parliament, though they did not permanently affect either the extent of the British power, or its relation to the native states. During Mr Hastings overnment, the revenue had been somewhat increased, but the debt had been augmented in a greater proportion. This, however, had resulted from the wars in which the Company were involved, particularly that with Hyder, to which Mr Hastings could scarcely be considered a party. The violent clamour against him led to his impeachment before the House of Lords, and his trial lasted from 1788 to 1795, in the course of which it appeared that, if he had not been free from blame, it was evident that the magnitude of his offences had been considerably exaggerated: the sentence of "not guilty" was finally passed in a thin house upon all the charges; and the Company granted him a considerable pension.

exaggerated: the sentence of "not guilty" was finally passed in a thin house upon all the charges; and the Company granted him a considerable pension.

The affairs of India had meantime been made the chief ground of debate in Parliament betwirt the two great political parties. Mr Fox having obtained an ascendency in Parliament, brought in his memorable bill, by which nearly the whole government and patronage of India would have been taken from the Company, and vested in the Commons. It was passed without difficulty in that house; but through the influence of the king, it was rejected by the Lords. Mr Pitt obtained office shortly afterwards, and by means of his exertions an act was passed in 1784, which made a material change in the administration of India, by the estab-

lishment of a new body, invested with high powers, called the Board of Control, the functions of which will be immediately explained. The act contained very strict injunctions for the remedy of the evils whence the Company's embarrassments were injunctions for the remedy of the evils whence the Company's embarrassments were supposed to have arisen; in particular, to renounce all schemes of war and conquest, declaring that "schemes of conquest and extension of dominion in India, are measures repugnant to the wish, the honour, and the interest of this nation." In order to fulfil the objects of the act, Lord Cornwallis was appointed governor-general in 1786. Animated by the purest patriotism and integrity, and endowed with a sound judgment, he perhape did not possess those comprehensive views which form the complete statesman. In undertaking to place on an improved basis the financial and judicial systems of British India, he was guided by motives decidedly benevolent. But his arrangements in some cases proceeded on a very imperfect knowledge of the actual state of the country; and he applied principles founded upon abstract theory and English practice to a people in whom local prejudices had taken deep root. The sanguine expectations formed from his administration were therefore in a great measure disappointed. He was desirous, in conformity with his instructions, to abstain from aggression and conquest in every administration were therefore in a great measure disappointed. He was desirous, in conformity with his instructions, to abstain from aggression and conquest in every form, yet he allowed himself, on somewhat alender grounds, to be drawn into hostilities with Tippoo, which added a considerable part of Mysore to the Company's possessions, and laid the foundation for other conquests on a still greater scale. The result, on the whole, has been, that, instead of "conquest and extension of dominion" being abandoned, it was from this time that, in the mode of acquiring territory, the Company dispensed with mercantile intrigue, and began to assume more of a purely military character.

In 1793, the charter was renewed (83 Geo. III. c. 52) for 20 years. In the same year, the public debt of £4,200,000 due to the Company was joined to the 3 per cent. stock; but as £2,992,440 of this debt had been previously sold, they became holders to the extent of the balance only, viz. £1,207,560, which last sum was not paid up until some years afterwards. At this period their revenues amounted to £8,225,628, the expenditure to £7,007,050, thus yielding a surplus

the 3 per cent. stock; but as £2,992,440 of this debt had been previously fold, they became holders to the extent of the balance only, viz. £1,207,560, which last sum was not paid up until some years afterwards. At this period their revenues amounted to £8,225,628, the expenditure to £7,070,500, thus yielding a surplus of £1,218,578; and the debt was reduced to £7,971,665. This state of affairs became the subject of vehement declamation in Parliament and sewhere; and the Act, after directing payment of a dividend of 10 per cent., with \$\frac{1}{2}\$ per cent. more eventually from a separate fund, and providing a sinking fund of £500,000 per annum, gravely appropriated an equal amount to be annually paid into the British Exchequer; besides contingent sums of "surplus profits," which were to be applied in a similar manner. It may be almost superfluous to state that these golden dreams were never realized. The hostilities against the French, which commenced in 1793, led to their being entirely stripped of their Indian settlements; but though annihilated as a separate party, they continued to intrigue with the native princes, particularly Tippoo. This led to the Mysore war of 1799, the destruction of that sultan, and the complete breaking up of his territory. In 1802, the Mahratta war commenced, the most important of all in which the Company have ever been engaged. Amidst these extended operations, the surplus of revenue soon disappeared; and it was not found convenient to make more than two payments of £250,000 each to the public, in the years 1793 and 1794. In 1797, a deficiency occurred, which continued till 1811, although, by the extension of territory in the interval, the revenue had increased from about 8 to 15½ millions sterling. In 1810, the Company obtained temporary assistance from the public, by the advance of £1,500,000 in Exchequer bills. They again received accommodation in 1812, by a loan of £2,500,000: this last was liquidated by annual payments, and finally discharged in 1822.

In 1808, the Company

considerable importance. The exports of the country traders, consisting chiefly of considerable importance. The exports of the country traders, consisting chiefly of opium and cotton wool, considerably exceeded in value their imports in return; while, on the other hand, the shipments of tea by the Company were of much greater value than their outward investment. The balance was therefore adjusted through the country traders, by means of bills drawn by the Company's servants at Canton upon the Bengal government, and to a small amount also on the Court of Directors in London. Previous to the great extension of the country trade, the tea was principally paid for with bullion exported from England,—the export of goods, which principally consisted of woollen cloths, with a small quantity of iron, being wholly inadequate to that purpose.

In 1813, the act 53 Geo. III. c. 155, was passed, which renewed the charter for a period of 20 years, from April 22, 1814. By this statute the trade with India was thrown open to the public under certain regulations; while that to China, and the tea trade generally, was reserved exclusively to the Company. At the same time, the territorial and commercial branches were separated, as well as all accounts connected with them. During the 20 years embraced by the charter, there occurred the Nepaulese war, 1814 and 1815; the Pindaree war, 1817 and 1818; the Burmese war, from 1824 to 1826; besides others on a smaller scale, including Bhurtpore in 1826. Most of these operations led to an enlargement of territory, and consequently to an increase of revenue, but likewise, as before, to a corresponding amount of expenditure and debt; during the Burmese war alone the debt being augmented by the sum of £13,007,823.

Before the trade to India was thrown open in 1813, it was confidently stated, in a report which the Directors forwarded to the Board of Control, "that all the expectations then entertained by British merchants as to the wished for opening of the Indian trade were groundless and delusive; that those who should act

Before the trade to India was thrown open in 1813, it was connectify stated, in a report which the Directors forwarded to the Board of Control, "that all the expectations then entertained by British merchants as to the wished for opening of the Indian trade were groundless and delusive; that those who should act upon them if the trade were opened, would be sure to experience ruin, loss, and disappointment; and that the abolition of the Company's commercial privileges would be in effect the extinction of the whole of the present Indian system." Nothing daunted by this statement, the merchants at once entered into the new trade with spirit, and the following table, showing the progress of both parties, well illustrates the effects of the change:—

Declared Value of the principal Exports from Great Britain to all places Eastward of the Cape of Good Hope (except China), in the Years 1814, 1823, and 1832, distinguishing the Private Trade from that of the East India Company.

	18	14.	1823.		18	32.
	Company.	Private.	Company.	Private.	Compary.	Private.
	£	£	£	£	£	£ 87,606
Beer and ale	434	49,588		97,188		87,606
Copper, wrought & unwrought	23,962	28,638	90,055	68,169	11,180	178.036
British cottons	17,778	91,702		1,128,468	268	1,531,125
Cotton twist and yarn		7		16,993	12	309,719
Glass	2.983	65,460	1.486	122,167	1.060	100.087
Hardware and cutlery	11,720	15,163	6,087	76,176	11,264	71,025
Iron, wrought and unwrought	93,945	69,836	36,409	132,559	3,012	141,681
Linen manufactures	17,167	6,267	1,894	19,130	5,341	43,718
Silk manufactures	246	18,079	29	25,742	45	25,159
Wines	11.297	260.882	1,328	115,997	308	149.949
Woollen manufactures	235,151	20,213	85,649	221,489	37.801	199,708
Other articles	412,575	422,297	235,620	933,627	78,902	763,283
Total	896,558	1,049,132	458,550	2,967,705	149,193	3,601,093
	£1,87	4,690	£3,4	6,255	£3,78	0,286

The preceding table shows, that notwithstanding the great reduction in the prices of most of the commodities which make up our export trade with India, the value of the shipments was doubled within the 18 years from 1814 to 1852, while in British cottons, twist, and yarn, the increase was eighteen fold; an increase the more worthy of notice as occurring with regard to a species of manufactures for our supply of which we were not many years before dependent upon the looms of Hindostan. In comparing the Company's with the private trade, it will be observed, that while the former progressively decreases, the latter rapidly increases. Indeed, as the Company's exports include military stores as well as merchandise, it may be held to have virtually expired in the year 1825, in which year the value of the goods exported by them amounted to only £73,000. These results, viewed in connexion with the fact, that for not a few years prior to 1814 little alteration had occurred in their exports, showed conclusively that the increase was owing entirely to the activity of the private traders.

to the activity of the private traders.

The unfitness of a large corporation like that of the East India Company to prosecute commercial dealings being now apparent, Parliament had little hesitation, when called upon to legislate on Indian affairs in 1833, in not only abolishing their monopoly of the China trade, but in preventing them from carrying on any mercantile operations whatever, and of restricting them to the administration of their vast territories. This change was effected by the three acts of 3 & 4 Wm. IV. c. 85, 93, and 101. The first is entitled An Act for effecting an Arrangement with

the East India Company, and for the better Government of his Majesty's Indian Territories, till April 30, 1854; the second, An Act to regulate the Trade to China and India; and the third, An Act to provide for the Collection and Management of the Duties on Tea. The general amount of the provisions of these acts was to throw open, for the first time, the countries to which they relate, to British enterprise and capital. Down to 1813 both China and India were as completely shut against the people of this country generally, as if they had been hostile regions. The charter of 1813 diminished, to a certain degree, this restriction, by allowing the ships of private traders to resort to India, and, more recently, regulations of the Indian government permitted a limited extent of land for indigo plantations to be held in India by persons who were not natives; while trade was licensed by the Company between China and India. But much of this was upon sufferance, and no relaxation of the monopoly of the trade between China and England had and no relaxation of the monopoly of the trade between China and England had ever been conceded.

CONSTITUTION AND PRESENT CONDITION OF THE COMPANY.

The government of the East India Company's territories is composed of the Home Government and the Executive Government in India.

The Home Government consists of, lst, The Court of Proprietors; 2d, The Court

The Home Government consists of, 1st, The Court of Proprietors; 2d, The Court of Directors; 3d, The Board of Control.

The Court of Proprietors elect the Directors, and make by-laws, which are binding in all matters not regulated by Act of Parliament. General courts are held quarterly, in March, June, September, and December, at which no one can be present unless possessed of £500 stock; and the proprietors rate according to the amount which they possess. The lowest sum which entitles a proprietor to a single vote, is £1000 (of which he must have been in possession for the preceding 12 months, unless such stock was obtained by bequest or marriage); £5000, two votes; £6000, three votes; and £10,000, four votes. No greater number of votes can be given by any one proprietor. The number of proprietors lately entitled to vote was 1976; of which 54 possessed each four votes; 50 each three; 370 each two; and 1502 had single votes.

The Court of Directors consists of 24 proprietors, who are elected for four years; six going out annually by rotation. They are re-eligible, and generally are re-elected at the expiration of a year; thirteen form a court. The qualification for a seat in the direction is the possession of £2000 stock. The election takes place on the second Wednesday in April in each year. The Directors elect annually, a seat in the direction is the possession of £2000 stock. The election takes place on the second Wednesday in April in each year. The Directors elect annually, from their own body, a chairman and deputy-chairman. The court conducts the whole affairs of the Company, subject to the superintendence of the Board of Control. They nominate the governors of the presidencies, subject to the approval of the crown. They can recall the governors, or any other of their servants, independently of the Hoard of Control. Such despatches as that Board consider should be secret, are forwarded to India by a \$Secret Committee, which usually consists of the chairman, deputy-chairman, and the senior member of the court. These all take the cath of secrecy, and form the channel through which are transmitted the orders and instructions of the Board on all matters relating to war or peace. The Directors are allowed an appeal from the Board of Control to the king in council; which, as Mr Mill observes, is little else than an appeal from the king to himself, and has never in practice been resorted to.

The Board of Control consists of six members, among whom must be the Chancellor of the Exchequer and a Secretary of State; one of which high officers, appointed to act as president, does in fact exercise nearly the whole power of the Board. Its functions are described in Mr Pitt's not of 1784, somewhat vaguely, in the following terms:—" From time to time to check, superintend, and control all acts, operations, and concerns, which, in any wise, relate to the civil or military government or revenues of the territories and possessions of the United Company in the East Indies." They are authorized to inspect all correspondence and despatches to and from India, and the proceedings of the Courts of Proprietors and Directors; also to have access to all documents belonging to the Company. They have the power to alter and amend the instructions which that body send out to their servants; and in certain special cases, as has just been noticed, can tr

their servants; and in certain special cases, as has just been noticed, can transmit orders directly through a secret committee of the Directors, who act as the mere channel of their communications. The Board of Control is now almost the sole governing power; they direct all the grand measures, nominate the commander-in-chief, and influence the other important appointments. They also possess by courtesy a large share of the general patronage; the president, who is a cabinet

minister, is virtually secretary of state for India, and in Parliament is held accountable for the proper administration of the affairs of that country.

The Board of Control and Directors have, on the whole, worked together with a greater degree of harmony than might have been expected from an independent and ill-defined jurisdiction. It is admitted, however, that the details of Indian affairs have been generally administered by the Directors without vexations or oppressive interference from the controlling authority.

The establishment of the Company in England, in 1835, comprised 494 persons, whose salaries and allowances amounted to £134.454.

The establishment of the Company in England, in 1835, comprised 494 persons, whose salaries and allowances amounted to £134,454.

THE EXECUTIVE GOVERNMENT IN INDIA is administered at the three presidencies, Bengal, Madras, and Bombay. In the first, the government consists of a governor-general and four councillors; and at the two others, of a governor and three councillors. The commander-in-chief is generally a member of council. The governor-general has a controlling power over the governors of Madras and Bombay. The making and enforcing of laws in the respective presidencies is vested in the governors in council, subject, in certain instances, to the consent of the supreme count of indicature, to register these decrees: and in all cases to the approval of in the governors in council, subject, in certain instances, to the consent of the supreme court of judicature, to register these decrees; and in all cases to the approval of the Board of Control and Court of Directors. Two systems of judicature exist in India,—the Queen's supreme courts, whose jurisdiction extends over Europeans generally, and affects the natives only in and within a certain distance around the several presidencies; and the Company's courts, in which there is a mixture of European and native judges.

THE COMPANY'S TERRITORIES.

The Company's dominions, besides the presidencies of Bengal, Madras, and Bombay, and the territories from time to time annexed to them by cession or conquest, comprise numerous tributary or protected states, the princes of which acknowledge the supremacy of the British government. According to the last edition of Mr Hamilton's Indian Gazetteer, the area and population of the whole, including the states in Hindostan still independent, are as follow:—

	Sq. miles.	Population.		Sq. miles	Population.
Bengal Presidency		57,500,000	Independent States.	79.000	0 000 000
Bombay Presidency	11,000	15,000,000 2,500,000	Nepaul Raja	53,000 50,000	2,000,000 3,000,000
Territories in Deccan, &c.	,	2,200,000	Ameers of Sinde	94,000	1.000.000
acquired since 1815,			Dominions of Sindia	40,000	4,000,000
mostly attached to Bom- bay Presidency	60,000	8.000.000	Cabul, east of Indus*	10,000	1,000,000
bey researched				177,000	11,000,000
	553,000	83,000,000			
Allies & Tributaries.			India beyond the Ganges.	ļ	
Nizam		10,000,000	British Acquisitions in	1	
Nagpoor Raja	70,000		1894 and 1895.		
King of Oude	90,000			l	
Guicowar	18,000	2,000,000	consisting of part of Mar-	ļ	
Kotah, Boondee, & Bo- paul.	14,000	1,500,000	taban and Tavay, Ye, Tenasserim, and Mer-	l	
Mysore Raja	27,000			12,000	51,000
Satara Raja	14,000		Arracan	11,000	100,000
Travancore and Cochin	8,000		Assam and adjacent petty	,000	-50,000
Other Rajas and Chiefs		15,000,000	States	54,000	150,000
Total	1,103,000	123,000,000	Total	77,000	301,000

STOCK, FINANCES, &co.

STOCK, FINANCES, &c.

The Capital Stock of the Corporation amounts to £6,000,000, of which there were subscribed, at the union of the two Companies in 1708, £3,200,000; in 1786, £300,000 ; in 1789, £1,000,000 and in 1794, £1,000,000. The act of 1833, while it determined that the government of the Indian territories should be continued to the Company until the 30th of April 1854, directed (as already noticed) that their trading privileges should cease from the 22d April 1834, that their commercial assets should be assigned to government for the purpose of discharging the territorial debt, and that, from the proceeds of the saleable effects, the sum of £2,000,000 should be taken, to be invested in the public funds, as a guarantee for the redemption of the capital stock.

^{*} Cabul may now be included under the protected or allied states.

The Security Fund thus created, consists of government 3 per cent. stock, which amounted, on the 5th July 1837, to £2,461,562, 16a. 8d.; composed of consolidated 3 per cent. annuities, £6841, 17s. 7d.; and reduced 3 per cent. annuities, £24,544,720, 19a. 1d., held in the name of the Commissioners of the National Debt.

EAS

The Dividend, annually payable to the proprietors, has been 10½ per cent. since Midsummer 1798; and this rate is secured to them under the new act. It was payable formerly out of the commercial assets of the Company only; but by the late act it is constituted a charge upon the territorial revenues of India. It is payable at the East India House half-yearly, namely, on the 5th of July.

The Redemption of the Capital Stock may take place on or after the 30th of April 1874, at the option of the legislature, on payment of £200 for every £100 of stock; but it is provided, that in case the government of India should be taken from the Company in 1854, the redemption of the stock at 200 per cent. may be claimed by

the Corporation.

The Debt of the Company consists of (1.) the India Bonds; and (2.) the Territorial Debt.

(1.) The "India Bonds" comprise the floating debt of the Corporation in this country; they are for sums of £100, £200, £300, and £500 each, and being payable country; they are for sums of £100, £200, £300, and £500 each, and being payable half-yearly to the Company at par, they are commonly used in London (where they are constantly marketable) as an investment for money that is liable to be suddenly called for. The interest (always computed up to the day on which they are bought or sold) is payable at the East India House on the 1st of April and the 1st of October: its present rate is 3½ per cent. The amount of these bonds in circulation, prior to the last renewal of the charter, was about £3,700,000; but it has been since greatly reduced. In the year 1839-40, the annual charge on account of the home bond debt is stated at only £51,828.

(2.) The "Territorial Debt" in India amounted, on the 30th of April 1838, to £30,249,898, bearing, at various rates, interest amounting to £1,427,366 a-year. About one-fourth of this debt is held by natives. Only a portion of it is transferable in London, consisting of a 5 per cent. loan, the dividends on which are payable at the East India House, twelve months after they become due in India, at a fixed rate of exchange.

rate of exchange.

The Revenue and Expenditure in India for the last two years for which it has been published are as follows:

Revenues.	1837-58.	1858-59.0	Charges.	1837-38.	1838-39. *
BengalCo.'s rupees Agra. Madras. Bombay	7,22,27,200 3,34,20,136 3,74,70,004 1,75,89,877	7,10,03,106 4,06,61,737 3,76,93,899 1,51,30,278	Bengal, Co.'s rupees Agra Madras Bombay	6,69,15,428 77,98,714 3,22,36,136 2,08,52,805	7,93,93,089 86,29,471 3,28,81,619 2,07,01,110
Sum of Ordinary Revenues	16,07,07,217	16,44,89,022	Sum of Ordinary Charges of India	12,78,03,083	14,16,05,989
Equal in sterling \pounds	15,066,302	15,490,845	Equal in sterling £	11,981,539	13,275,496
Extraordinary Re- ceipts.			Extraordinary Charges.		
Bengal Madras Bombay	1,98,569 14,703	1,76,659 485	BengalBombay	64,480	4,419
Rupees	2,13,272	1,77,137	Rupees	64,450	4,412
\pounds sterling	19,994	16,606	\pounds sterling	6,042	413
Total £ sterling Deficiency in 1838-39.	15,086,296	15,437,451 453,923	£ sterling Charges in England	11,987,581 2,304,445	13,275,909 2,615,465
1			TotalChargesofIndia Surplus in 1837-38	£14,292,(195 794,270	15,891,874
£	15,086,296	15,891,374	£	15,086,296	15,891,374

The revenue of the Company is derived principally from the land, over which (as common in the East) it exercises the right of ownership, not by retaining actual possession, but by levying assessments which have been usually so calculated as to realize the greatest amount of rental that could be safely extracted from the cultivators. Formerly, the lands were held by the ryots or cultivators of the soil,

^{*} Stated in the accounts as partly estimated.

EAS

whose right of perpetual occupancy was never questioned, but who were subject to the demands of their respective governments,—demands unlimited as to right, but limited in extent by custom. Different systems existed as to the mode of collection. limited in extent by custom. Different systems existed as to the mode of collection. In some places the rent or tax was collected in one sum from each village, which kept up a body of officers whose functions consisted in proportioning and levying the assessment according to the means of the ryots. In other cases, government appointed officers, who received charge of several districts, and who were remuerated by a per centage upon the amount collected. These functionaries were called semindars, whence the plan acquired its name of the semindary system. Their allowance formerly was one-tenth part of the collections; but in the year 1783, the Marquis Cornwallis, then governor-general, formed the resolution of placing the zemindars in the situation of proprietors, by fixing the assessment against them, and engaging not to raise at any time its amount. This arrangement, termed the vermanent settlement, has been established through a great part of the termed the permanent settlement, has been established through a great part of the presidencies of Bengal and Madras. It was hoped that by this means the zeminpresidencies of Bengal and Madras. It was hoped that by this means the zemindars would have been induced to improve their estates, since the whole increased revenue resulting from such improvements would have been permanently theirs. Unfortunately, however, the power thus confided to the landholders has been used principally as the means of oppressing the cultivators; and in order to remedy this evil, the Company has, of late years, with the view of abolishing the system of middlemen, become the purchasers of all estates thus held which have been brought to sale, and making their bargain directly with the farmers or ryots; whence the plan is termed the restorance existen. plan is termed the systems of revenue, the principal is the monopoly of salt, which is

Of the other branches of revenue, the principal is the monopoly of salt, which is manufactured by the agents of government, and disposed of by public sale for ready money. The next in point of importance is the monopoly of opium, which in the year 1837-38 produced 2,09,65,187 Company's rupees, subject to R. 65,97,949 of charges, leaving R. 1,43,67,238 net. Being produced chiefly in the province of Bahar, the impost is levied only in the Bengal presidency. It has to compete, however, with the opium of Malwa, originally much inferior, but which, being manufactured by free cultivation, has improved greatly both in quantity and quality. The latter is exported at Bombay, where it pays a custom duty; a system which has been strongly recommended in Bengal, and would be attended with many advantages; but the large amount of the revenue, and the dread of mungling, has caused every change to be viewed with apprehension. Tobacco is made a subject of monopoly only in the western districts of the Madras presidency. a subject of monopoly only in the western districts of the Madras presidency. Customs are levied on the exportation, and also, down to 1837, on the inland transit of goods. Another order of imposts, which bears the title of soyer, appears to consist of dues levied at markets and the gates of towns. With these are usually consist of dues levice at markets and the gates of towns. With these are usually combined a second class called abkares, which are laid chiefly, in the form of license, on spirits, opium, and every species of intoxicating drugs. The other branches are derived from stamps, post-office, mint, marine duties and pilotage, to which may be added judicial fees and fines.

The expenditure consists partly of dividends to the proprietors, partly of charges attending the collection of the revenue and the maintenance of the various civil functionaries, but chiefly in the support of the Company's military establishment.

THE INDIAN ARMY.

In the government administered by the Company the most striking feature is that military force by which their colossal empire was mainly acquired, and is still held in subjection. Its composition is, perhaps, more remarkable than that of any army ever levied; for India is subjected to a foreign yoke by her own soldiers, paid with her own money. It might at first appear that a conquering state could not, without the utmost peril, rely on such means; but the incorruptible fidelity of the native troops or sepoys, under British commanders, has entirely removed all such apprehension. This army attained, by gradual steps, its present strength and discipline. A few battalions were at first employed merely as an appendage to the Company's forces, and at that time, cantain, adjutant, and appendage to the Company's forces, and at that time, captain, adjutant, and some sergeants were the only English officers attached to them. With the skill which these communicated, they easily vanquished the irregular troops of the native princes. When the latter, however, began to introduce European tactics, it became necessary to raise the indigenous force to a higher degree of efficiency; their complement of British officers was progressively increased, and they were more and more assimilated to regiments of the line. This method was brought into

full operation in 1796; since which year no native has been allowed to rise above the rank of subahdar, the highest pay attached to which is 147 rupees per month; and in that station he is subject to the command of the youngest subaltern from

England.

The following was the effective force of the Indian army in 1837; namely, British forces, consisting partly of Queen's troops, and partly of the Company's European regiments, 26,582; native troops, including 3728 British officers, 157,788; contingent native forces, 111,500; total, 295,840. Since the year just specified, the hostilities in Afghanistan and China have doubtless led to a very considerable

hostilities in Afghanistan and China have doubtless led to a very considerable increase in these numbers. \$\mathbb{E}\$

EAST INDIES. [India.]

EAU DE COLOGNE, a celebrated preparation for the toilet, is nothing more than aromatized alcohol. It is extensively manufactured in France from silent brandy, mixed with sage, thyme, camphor, cloves, and other herbs and spices; the whole being macerated together, and then distilled.

EAU DE Lucz is formed of the distilled oil of amber and water of ammonia.

EBONY (Fr. Ebbens. Ger. Ebenhols), a hard, durable, black-coloured wood, obtained from different species of Diappros, a large tree, found in tropical countries, especially in India, the Malayan Islands and Peninsula. That which is considered to be of the best quality is the D. ebenus, a native of the Mauritius, Ceylon, and Madagascar; being jet-black, astringent, and of an acrid, pungent taste. Ebony, besides its other qualities, is susceptible of an elegant polish or lustre, and has always been held in high estimation; it is at present chiefly used for purposes in turnery; but it is in less request now than formerly for cabinet-making, cheaper woods, dyed black, particularly that of the pear-tree, being commonly substituted for it. About 2000 tons are annually imported.

ECU, an old French silver coin worth 6 livres; also a Swiss piece of 40 batzen.

ECU, an old French silver coin worth 6 livres; also a Swiss piece of 40 batten. ECUADOR, or EQUATOR, a state comprising the S. W. part of the former republic of COLOMBIA, is situated on the W. coast of S. America, betwirt New Granada and Peru; and extends from 6° 30′ S. to 2° N. lat., and from 70° to 81° W. long. Area \$25,000 square miles. Population, 600,000, of which about 160,000 are whites of Spanish extraction; the rest chiefly Indians. Divisions, Extraction of the property of the pro Ecuador or Quito, Guayaquil, and Assuay, each subdivided into provinces. Capital, Quito, an inland town, and one of the finest cities of S. America; pop. 70,000. The government is republican, consisting of a senate and house of representatives, both elected by the cantonal deputies of the provinces, in a provisional assembly held once in four years.

once in four years.

The country is intersected by the Andes, and the temperature of course differs considerably in the elevated lands adjoining those mountains, and in the low countries on both sides of the rangs. The department of Quito, though subject to earthquakes, possesses a very mild and salubrious climate. That of Guayaquil and the valleys along the coast is warmer, and the portion of Assura adjoining the river Amazon and its tributaries is very hot. The difference of climate gives a varied character to the productions of the country. The most important are cooca, sugarcane, cotton, tobacco, and cinchons bark. The last is obtained chiefly from forests in the mountains of Loza in Assuay. In the department of Guayaquil, oak and other timber trees are produced, including the strong wood called guachapeli, cedar, ebony, and other cabinet woods. There are gold and silver mines in Quito, and at Zaruma in Assuay; but the country is less rich in the precious metals than the other states which comprehend a portion of the Andes. Quicknilver, however, is found at Asogues; lead also exists; sulpbur is prepared in considerable quantity at Tesoan, in Chimboraxo; and salt is procured on the coast.

The maritime commerce of Resudor is concentrated at Guayaquell, a flourishing port situated in g° 18°S., and 79° 53° W., on the N. bank of the river of the same name, the estuary of which is here about 3 miles broad; pop. 22,000. The port is one of the best on the Pacific, but the town is unhealthy, ill supplied with water, and from being built of wood, very subject to fires. On the S. bank of the river, there is a dockyard much used for shipbuilding. Exports, chiefly cooca (nearly 9,000,000 lb.), which is mostly sent to Spain, Mexico, U. States, and Peru, timber, hides, cattle, and tobacco; the annual value of the cargoes being nearly £320,000. The imports, consisting of British manufactures, wine, silks, and other articles, are of nearly the same amount.

Mexicure Weighte, and Mexicure are as New Guaracte.

amount.

Measures, Weights, and Money, same as New Granada.

Finances.—The annual revenue and expenditure are each estimated at \$300,000. The domestic debt is unknown. The foreign debt consists of \$15 per cent. of the loans contracted in London for Colombia in 1833 and 1834, or £1,451,250, exclusive of arrears of interest thereon, at 6 per cent. since 1836.

EEL, a peculiar description of fish resembling the snake in its external form, but having otherwise little similarity. There are different species, but the most common is the sharp-nosed cel (Murana anguilla). Eels inhabit almost all our rivers, lakes, and ponds; and are in great esteem for the table. The best kind—

the silver eel—is that found in the clearest waters. The dingy yellow, and the deep sallow-green, are very inferior to the clear coppery brown-backed eel, and even to the bronze-coloured. Their freshness is known by their vivacity of motion. "The London market is principally supplied from Holland by Dutch fishermen. There are two companies in Holland, having five vessels each: their vessels are built with

London market is principally supplied from Holland by Dutch fishermen. There are two companies in Holland, having five vessels each: their vessels are built with a capacious well, in which large quantities of eels are preserved alive till wanted. One or more of these vessels may be constantly seen lying off Billingsgate: the others go to Holland for fresh supplies, each bringing a cargo of 15,000 to 20,000 lbs. of live eels" (*Yarrell*). About 70 cargoes are annually imported.

EFFECTIVE, a term used in many parts of the Continent to express coin, in contradistinction to paper-money. Thus bills upon Vienna are generally directed to be paid in *effective*, to guard against their being paid in paper-money of a depreciated value: very frequently also, the particular money in which the bill is to be paid is specified; as in 20 kreuser pieces.

EGGS (Fr. (Eufs). The eggs of domestic fowls form a considerable branch of inland traffic, more particularly betwix Ireland and Britain. "The trade in eggs, the value of which, for export, according to Mr Williams, in 1832, amounted to £500 a-day, paid by England to Ireland, is carried on with considerable vivacity at Lanesborough, and also at Tarmonbarry."—" In the height of the season, the prices at Lanesborough were from 2s. 6d. to 4s. per 120; but towards the winter, they rise to 5s. The eggs are packed in layers with straw, in crates. Each crate will hold about 84 hundred of six score, that is 10,080, the first cost being from £10, 10s. to £16, 16s. per crate. These are sent forward on speculation to Dublin, or occasionally at once to the English market; and a profit of £4 or £5 per crate is considered a fair remuneration" (Weld's Roscommon). Eggs are also largely imported from abroad,—no fewer than 96,000,000 being at present brought annually from the Continent, chiefly from the department of the Pas de Calais in France. Throughout the whole of that kingdom the egg trade is carried on to an extent hardly credible in this country. In a paper lately read by M. Legrand to

EGYPT extends in length about 500 miles along the river Nile, from its mouth pwards; and comprehends a breadth of 200 or 300 miles from the Red Sea to an upwards; and comprehends a breadth of 200 or 300 miles from the red sea to an ill defined boundary in the Libyan desert. It was formerly divided into 16 provinces, but is now composed of 24 departments, which are subdivided, according to the French system, into arrondissements and cantons. Population, 2,500,000, chiefly Arab-Egyptians or Felahs. Capital, Cairo, an inland city; pop. 240,000. Egypt is an appendage to the Turkish empire; but is under the government of a pasha, whose power is nearly despotic, though he occasionally consults a council composed of his chief officers.

The cultivated part of Egypt is confined to the banks of the Nile. This region is divided by nature into two parts.—Lower Egypt, composed of the alluvial tract formed by the Delta of the Nile; and Upper Egypt, an exceedingly narrow valley which extends nearly 400 miles along the Nile shove its separation. On the E. and W. of this valley lie mountains and waste deserts, interspersed with cases. The climate of Upper Egypt, though hotter, is more healthy than that of the Lower country, where the plague is said to be indigenous, and ophthalmia and dysentery common in the autumn. In the latter, the annual range of Pahrenheit in the shade into 80° to 100°. The climate is, however, principally characterized by its great dryness, which would reader Egypt a desert were it not that the high lands of Abyasinia are periodically denched by heavy rains, which lead annually, betwirt July and October, to the overflow of the Nile, and the irrigation of the greater part of the country.

"In Egypt, one necessity absorbs all others: unless the inundations of the Nile irrigate the lands, in vain, through immense districts, is the seed sown, in vain the husbandman goes forth to harvest. The inundations are very various in their character and consequences: when favourable to the upper regions, they are excessive in the lower; and when they suit the lower districts, they sometimes leave the higher country almost dry. The average course of the stream of the Nile is 1366 tolses per hour, but the current is considerably increased during the time of the inundation. The prevalence of northerly winds more than compensates for the rapidity of the stream for vessels bound upwards. An inundation of the elevation of 24 coudees in Upper Egypt will give 21 at Cairo and 4 as the mouths of the Nile. The most productive inundation is from 15 of 11, measured by the nillometer at the island of Rhoda, opposite Cairo. The dike which lets out the waters of the Nile is cut when the elevation is 190 inches; and the "Ouafa Allah," or "Allah has kept his pro

2,000,000 feddens are cultivated. The miri (land-tax) was, in 1831, established on this basis. But often the Nile does not rise above 19 coudees, and the inundation is not permanent enough to produce the effect desired. Egypt is calculated to have 3,500,000 feddens of cultivable land, if cultivation were pushed to its greatest extent." (Rowring's Report on Egypt, p. 12.)

There are few minerals. The productive powers of the soil, however, are incalculable. Wherever water is scattered, there springs up a rapid and beautiful vegetation; the seed is sown and watered, and scarcely any other care is required for the ordinary fruits of the earth. The agricultural produce consists of winter plants, which are sown and reaped after the inundation, and of summer plants, which are raised by artificial irrigation. In some parts three crops are obtained in the course of the year. The chief articles are wheat, barley, cotton, makes, millet, a variety of leguminous plants, tobacco, indigo, and flax. Bugar is cultivated throughout a large portion of Upper Egypt, and rice in the low lands near the Mediterranean. There are basies a great variety of fruits; but there are no timber trees. The improvement of the country has been varily extended; and in several respects revolutionised, under the energetic government of the present peaks, Mohammed All. During his reign the cotton-plant has been introduced, and its cultivation so far carried, that the annual adaptments of wool now amount to from 100,000 to 180,000 bales. He has also bestowed great attendion on flax, the sugar-cane, indigo, optim, madder-roots and other dye-stuffs; and of late he has established a colony of Syrians in Tumulaut, the ancient Land of Gooben, for the purpose of cultivating the mulberry and rearing silk-worms. The peaks has likewise attempted the introduction of cotton-factories, and other European arts, but in general the native manufactures of Egypt, is pretty extensive, but suffers greatly from the monopolites of the peaks, whose views, though in many re

merchants, so far at least as to advance funds, and enjoy a portion of the profit. The commerce may be divided into the inland and caravan trade; the Rod sas trade; and the Mediterranean trade.

The Chief commercial city of the interior is Cairo, but its trade has of late years much diminished, having ceased to be a depot, as it formerly was, both for articles of export and import. Alexandria, from the greater facilities which its position offers, has supplanted it in importance, and Cairo is now a great market only for guma, and some other secondary articles. Of late, there has been a considerable export of diamonds and other precious stones to the East in importance, and cairo is now a great market only for guma, and some other secondary articles. Of late, especially to Calcutta; but there is no English establishment, and the stocks of manufactures which exist are principally for the consumption of the place, the buyers for the instrict finding it more advantageous to supply themselves from the warehouses of the importers at Alexandria.

The ordinary communication between Alexandria and Cairo is by the Mahmoulde canal, which joins the Nile at Aifeh. Indeed this canal and the Nile are the most active, not to say the only channels of communication for the principal markets of Egypt. By boats of from 4 or 5 tons burden to vessels of 190, there is a perpetual intercourse on these two main arteries of commerce. Boulaq, the port of Cairo, and Aifeh, where the canal joins the Nile, are the principal places of shipment and landing.

There is, as already explained [Caravan], a yearly caravan of pligrims from Cairo to Mecca, and their brausit through Egypt, on their way to and from Arabis, will always create a considerable number of commercial transactions. The governor of Aifeh informed Dr Bowring, that the number who passed up the Nile to the holy cities was, yearly, from 30,000 to 35,000; but this estimate the doctor thought to be somewhat exaggerated. The caravan trade with the interior of Aifeis and with the Barba

THE RED SEA TRADE.

The END SEA TRADE.

The two principal ports of Egypt on the Red sea are, Sues, at the head of that guif, and Cosselv, about 300 miles further south. These ports communicate with Cairo and Kaseh respectively. Their chief exports are grain, butter, and sugar, sent mostly to Jidda and Yenbo; their imports, coffee, spices, silks, and piece goods. Keneth has generally sent large quantities of wheat to Arabia, sometimes as much as 300,000 ardebs per annum. The late augmented number of travellers from and to the East Indies, by way of Egypt, has increased the importance of both these ports, and particularly of Suez, which is that resorted to by the Bombay steam-vessels. Camels ordinarily perform the journey in three days from Cairo to Suez, and in four from Kaseh to Cosselv. The roads are now so safe that there is no accumulation into caravans; but goods are conveyed as they are ready with the utmost regularity and security.

THE MEDITERRANEAN TRADE.

The Mediterraranean Trade.

The great emportum of this trade, and the link which councets Egypt with Burope, is discondis, a celebrated scaport, lying in lat. 31° 18′ N., and long. 39° 35′ E. It is situated at the western extremity of the Egyptian coast, upon a neck of land between the sea and the bed of the old lake Marcotts; pop. 60,000. There are two ports; the best being the old one, on the W. side of the city, in which, though the entrance is rather narrow and difficult, ships may ride in from 35′ to 40 feet water; and there is good anchorage all along the shors. The small new harbour, on the E. side of the town, is exposed, and otherwise very inferior. Alexandria communicates with the Rile by means of the Mahmoudieh canal, already noticed. This was an ancient work, but it had fallen into disrepair, and was useless until restored by the present pashs in 1819. Exports, mainly cotton-wool; also rice, corn, opium, indigo, dates, gums, incease, dried fruit, coffee, senna and other medicines, hemp, linesed, mats, estrich feathers, node, skins, mother-of-pearl, and a variety of other articles; the quantity of corn exported, especially wheat, was formerly considerable, but it has gradually diminished, in consequence of the greater encouragement afforded by the pashs to the growth of cotton. This last, as also indigo and gums, are mostly sent to Trieste, Legnorn. Liverpool, and Marcellies; the rice and opium to Smyrna, Constantinople, and the Greek islands. Imports—from Great Britain, chiefly cotton manufactures, especially white cotton cotton, yarn and Germany, are received wines, spirits, oils, cotton manufactures, silks (principally grow de Naples and histrings), articles of dress, furniture, hardware, trinkets, and other commodities suited not only to Egypt, but the interior of Africa; from Austria, timber for building and fuel (a valuable import); from Turkey and the Greek isles, silks, tobacco, oils, wood, and fruits; from Byria and Asia Minor, caspets, especially small prayer carpets, tobacco, figs, soap, a

MEASURES, WEIGHTS, MONIES, DUTIES, &c.

The kirat = 3 troy grains; the dram or dirhem = 48 troy grains; the oke of 400 drams = 2\(\frac{2}{2}\) lbs. avoirdupois nearly; the rottolo or pound = 144 drams = 15\(\frac{2}{2}\) ox. avoird. nearly; the oke = 2\(\frac{2}{2}\) rottolis; the cantar of 36 okes, or 100 rottoli = 98\(\frac{2}{2}\) lbs. avoird. nearly.

Money.—The integer of account is the piastre or chirsh (of 40 fuddahs or paras), a base coin of alter and copper, usually estimated at about 2\(\frac{2}{2}\)d. sterling, or 100 piastres = £1; but this is subject to variation with the exchange. The smallest Egyptian coin is the fuddah; there are also pieces of b, 10, and 30 fuddahs. The smalesyeh and

Measures and Weights.—It is difficult to give any exact standard of Egyptian weights and measures. They not only vary in different parts of the country, but have been changed by caprictous legislation in the same way in which the currency has been at different times altered by firmans from Constantinople. The following are those in most general use:—

The common Egyptian cubit = 223 Imp. inches; the Indian cubit, chiefly used for Indian goods, = 25 Imp. inches; the cubit of Constantinople, to most of the produce sold by the subt of constantinople, to the cubit of Constantinople, to the first part of the first part of the cubit of Constantinople, to the cubit of Constantinople, to the first part of the first part of the cubit of Constantinople, to the first part of the first part of

were stated by the government to Dr Howring to be 900,000 purses, or £4,800,000; but no de-tails were furnished. The principal source of income is the seiri, or land-tax, which appears to be considered throughout Egypt as an equi-valent for rent. There is no national debt of any sort.

EIMER, a German wine measure, varying in different places from about 12 to 16 gallons; the Munich eimer, however, is only 8½ gallons.

EJOO, on INDIAN HEMP, a black fibrous substance resembling coarse horse-hair, which protrudes itself in large tufts from between the corticeous scales of the sago palm. The length of the fibre runs from 1 to 1½ foot, and each tuft contains about 6 lbs. of the hemp. Ejoo cable is said to be considerably stronger than

eoir; and it undergoes a longer exposure to sun and rain alternately, without experiencing any effectual damage. It has of late attracted notice, but hitherto has been used chiefly by the Malays about the Straits of Malacca.

ELATERIUM. [CUCHNER.]

ELDER, a common tree (Sambucus niger), various parts of which, especially the expressed juice of the berries, are occasionally used in medicine as a purgative. The tree is frequent in hedges in this country; it flowers in June, and ripens its

fruit in September.

ELEMI, a resinous substance obtained from incisions made during dry weather through the bark of the Amyris elemifera, a tree which grows in Brazil and other parts of S. America. It is brought to us in yellow, tender, transparent lumps, which readily soften by the heat of the hand, have a strong aromatic odour, a hot splcy taste, and contain about 12½ per cent. of ethereous oil. Elemi is used in making lacquer, to give toughness to the varnish.

ELEPHANTS' TEETH. [1 voar.]

ELI. a measure of length now superseded in the United Kingdom by the Im-

ELL, a measure of length now superseded in the United Kingdom by the Imperial yard. The English ell = 45 inches; the Scottish ell = 37 0598 inches; the Flemish ell = 27 inches. In Hamburg it is equal 22½, in Leipzic, 22½, and in

Flemish ell = 2/ inches. In Hamburg it is equal 225, in Lespaio, 225, and in Prussia, 265 inches nearly.

ELM, a graceful timber-tree (Ulmus) which attains a large size, and lives to a great age. There are about fifteen species. The common elm (U. compestris) is said to be indigenous to the southern part of this island. It is a tough and strong timber, but coarse and open in the grain, more especially when it has grown upon very rich land. Hence that which grows in the more fertile parts of England is far inferior to the produce of the midland counties of Scotland; the latter, which remains to be the mountain alm (II montand), being much closer in the grain, harder. far inferior to the produce of the midland counties of Scotland; the latter, which seems to be the mountain elm (U.montana), being much closer in the grain, harder, more handsome, and taking a finer polish. The English is seldom used but for common purposes, such as casks, coffins, and presses, while of the Scottish, chairs and other articles of furniture are made. Elm timber is quite unfit for building, on account of its tendency to warp and shrink during drought, and expand when moist; but if wholly under water it answers well; and bolts and nails drive better into it than into any other wood. It is also adarded for the averaged keep better into it than into any other wood. It is also adapted for the external kee.
of ships, and for the planks nearest to it, as these are seldom exposed to the air;
the same qualities fit it for piles in the construction of bridges and harbours;
though it should never be used above the low-water mark.

EMBARGO, a temporary injunction by the supreme government of a country

EMBARGO, a temporary injunction by the supreme government of a country prohibiting individuals or commodities from being conveyed beyond seas, or vessels from leaving their ports. There are two kinds of embargo, the one where the sovereign detains the vessels of an adverse nation in his harbours, the other where he suspends the sailing of those of his own subjects. The former generally takes place on a declaration of war, and is sanctioned by the law of nations; the latter is a matter of internal administration, involving, in this country, questions as to the power of the crown. On the issuing of a declaration of war, it has become, by the practice of Europe, generally the first step, to lay an embargo on such vessels of the country declared against as may happen to be in the ports of the government declaring. This step is reconciled with the old principles of the law of nations by the view, that the casus bells and virtual declaration will have taken place before the literal proclamation. With regard to the right of placing an embargo on British ships or subjects, it is of a wider range in time of war than in time of peace, and seems in the former case to embrace all those occasions where the prohibition can be presumed necessary or useful to the national defence. In time of peace, however, the sumed necessary or useful to the national defence. In time of peace, however, the crown must exercise the right within the limits which the law allows, the extent of which is somewhat doubtful. In 1766, a proclamation was issued prohibiting the exportation of corn, on account of the risk of famine; but it was thought necessary to pass an act of indemnity (7 Geo. III. c. 7), which characterized the order as one to pass an act of indemnity (7 Geo. III. c. 7), which characterized the order as one that "could not be justified by law, but was so much for the service of the public, and so necessary for the safety and preservation of his Majesty's subjects, that it ought to be justified by Act of Parliament." The proprietors of the embargoed ships were indemnified, which they would not have been had the embargo been legal. Loss by embargo is one of those which underwriters have to make good; while a breach of embargo is one of those breaches of warranty which release them from their obligation. An embargo laid on by the government of the country in whose port a vessel is, being but a temporary suspension, does not dissolve a contract for the employment of the vessel. But in the case of a British subject freighting a vessel which is subject to embargo on account of hostility to the country to

which the ship belongs, he will not be responsible for terminating the contract if the object of the voyage would be likely to be defeated by delay. (Chitty on L. of Nations, 68-73. Abbot, 429-431. Marshall, 511.) EMERALD, a beautiful ornamental stone of a poculiar green colour, which it derives from the intermixture of a small proportion of chrome. The common form of its crystal is the hexahedral prism; transparent or translucent; lustre vitroous. Sp. gr. 275. It scarcely differs from beryl, except in colour. Localities, Egypt, New Granada, Hindostan, Germany. "The most splendid crystals of emerald occur in a vein of magnesian limestone, which traverses a hornblende rock at Muso. occur in a vein of magnesian limestone, which traverses a hornblende rock at Muso, near Santa Fé de Bogota, in New Granada; some of these have been found exceeding two inches in length and breadth. Less distinct varieties occur at Mount Zalora, in Upper Egypt, the only locality of emerald with which the ancients are believed to have been acquainted." (Phillips' Mineralogy.)

EMERY, a granular variety of corundum usually mixed with iron ore. Its colour is intermediate between grayish black and blueish gray. Lustre glistening and adamantine. Sp. gr. 4. It occurs abundantly in the isle of Naxos, and at Smyrns. It is used for grinding and polishing hard minerals and metals.

EMIGRANT, in a general sense, is a person who leaves a country with all his property, to settle permanently in another, but it is more commonly applied restrictedly to an individual who leaves an old and thickly-settled country, to establish himself in one where there is abundance of land that has never been cultivated, and a thinly-scattered population. Emigration to new countries is a pecessary con-

himself in one where there is abundance of land that has never been cultivated, and a thinly-scattered population. Emigration to new countries is a necessary consequence of the constitution of man and society; but in order that it may be a successful undertaking, it is essential that it should include both capitalists and labourers, or persons who combine both characters. The abstraction of capital and industry might seem so much good taken from the mother country, but this is outweighed by greater advantages. A system of emigration, based upon right principles, is calculated to keep the pressure of population upon the means of subsistence, in an old country, constantly in a healthy condition; while the emigrants often retain in their new settlements, through the medium of commercial exchange, a connexion with the parent state, which is ultimately much more productive of wealth to it than if they had never withdrawn. Thus many who settle in North America or Australia, with nothing but their sinews and their industry, become the possessors of land and flocks, and purchase much more of the products of British labour and capital than if they had remained at home.

The emigrants from this country have hitherto mostly proceeded to the United

British labour and capital than if they had remained at home.

The emigrants from this country have hitherto mostly proceeded to the United States and Canada; but of late a considerable number have also gone to Australia, and recently not a few to New Zealand. The greatest number of persons who have hitherto emigrated in any one year was in 1832, when, according to the public accounts, they amounted to 103,313; of whom there went to our North American colonies, 66,339; United States, 32,980; Australian settlements, 3792; and Cape of Good Hope, 202. The official statements of the number of emigrants are, however, almost necessarily defective, as many persons proceed from the British islands as emigrants on board vessels which are not wholly devoted to the conveyance of passengers and of whom no record is text at the gustom-house. It ought veyance of passengers, and of whom no record is kept at the custom-house. It ought also to be noticed, in reference to the above-mentioned distribution of emigrants, that a large proportion of those who proceed to the United States have no intention of remaining there, but, in proceeding to Upper Canada, take the route of New York in preference to the St Lawrence, the navigation of which is both tedious and dangerous. The greater part of the emigrants from the United Kingdom are natives of Ireland.

The following is, in general terms, the nature of the conditions on which public lands can be acquired in the colonies:—In the Port Phillip district of New South Wales, and in Western and Southern Australia, they are sold at a fixed price, Wales, and in Western and Southern Australia, they are sold at a fixed price, which is for the present established at £1 per acre. In the following colonies sales are made by auction, and take place at certain periods, the land being offered at these respective upset prices; namely, Sydney district of New South Wales, comprising at present all parts except the Port Phillip district, 12s. per acre; Van Diemen's Land, 12s.; Ceylon, 5s.; New Brunswick, 2s. 6d. The Canadian rates cannot be stated with certainty, until after they shall have been revised by the united colonial legislature, now in the course of being assembled. In the Port Phillip district, and in Western Australia, the land is divided into lots of 320 acres, half a square mile. In Canada, the lot has generally been 200 acres; in Ceylon, 100 acres; in Van Diemen's Land and the Sydney district of New South Wales, the size of the lot is one square mile, except under special circumstances. In New South Wales, which was founded as a penal settlement, the supply of labour has been chiefly furnished by convicts; and this system, though in less favour than formerly, is still continued. With the view, however, of facilitating voluntary emigration, government now grants a free passage to labourers and mechanics accustomed to out-door work and not exceeding 35 years of age, proceeding to that colony or Van Diemen's Land. A similar advantage is granted by the South Australian Company and the New Zealand Company to labouring emigrants from the United Kingdom to their respective territories the funds for that grants from the United Kingdom to their respective territories, the funds for that purpose being derived from the sale of their lands,—a purpose to which they are specially appropriated; but no system of this kind has hitherto been established in reference to Canada or the other colonies. See Emigration. Supplement.

Most of the emigrants from this country being persons in humble life, unacquainted with shipping, and the precautions necessary to ensure safety, convenience, and economy, it has been of late years found necessary to place emigration vessels under statutory regulations. The following is an abstract of those at present in force :-

ABSTRACT OF THE PASSENGERS' ACT, 5 & 6 Wm. IV. c. 53 (1835).

ABSTRACT OF THE PASSENGERS' ACT, 5 & 6 WM. IV. c. 53 (1835).

§ 1. Act of Geo. IV. c. 21 repealed.

**Mumber allowed en Bourn', § 2. No ship carrying passengers from the U. K., Channel Islands, or Man, to any place out of Europe, shall carry more than 5 persons (including master and crew) for every 5 registret tons of such ship; sand no ship having more than one deck shall carry passengers upon such voyage, unless she be at least 6 itset in height between deck; and no ship; sharing only one deck allowed, unless a platform be laid beneath such deck, so as to afford a space of the company of the prices at which stores are to be sold by any person on 2 tiers of berths, while in ships having 2 tiers, there must be an interval of at least 6 incept the contracted to the bower tier: provided that whatever be the ship's tonnage, no greater number of passengers as to seaworthiness of ship, which are not resummed to the state of 1 pessengers are now the contracted to the ship's tonnage, no greater number of passengers and benefits and benefits and the ship is tonnage, no greater number of passengers and better the contracted to the state of 1 pessengers and Bertings, § 7. If doubts arise to the source of the company of the price of the company of the p

there must be an interval of at least 6 inches between the deck or platform and the floor of the lower tier: provided that whatever be the ship's tonnage, no greater number of passengers shall be allowed than after the rate of 1 person for every 10 superficial feet of the lower deck unoccupied by goods or stores not being passengers' luggage, if such ship shall not have to pass the line on her voyage, or after the rate of 1 person for every 15 clear superficial feet if such ship have to pass the line.

Fater and Provisions, § 3. No ship as aforesaid shall be cleared out unless there be on board good provisions for the use of the passengers, ever and above the victualling of the crew, as follows;—namely, § gallons of water to every week of the computed voyage for every passenger, such water being carried in tanks or sweet casks, and 7 lbs. of bread, biscuit, eatmeal, or breadstaffs to every such water being carried in tanks or sweet casks, and potatoes may be held equivalent to 11b. of bread, biscuit, oatmeal, or bread-stuffs, in the supply of any ship bound to N. America. When any ship shall be destined to call at a place in the course of her voyage for the purpose of filling up her water, a supply at the above rate for every week of the computed voyage to such place shall be destined to call at a place in the course of weeks deemed necessary for a voyage shall be computed according to the following rule: namely, for a voyage to N. America, 10 weeks; to 8. America, on the Atlantic, or to the W. coase of Africa, 12 weeks; to the Cape of Good Hope, 15 weeks; to the Mauritius 18 weeks; any other voyage, 34 weeks. \$\frac{1}{2}\$

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Miscellaneous Enactments, § 7. If doubts arise as to seaworthines of ship, which are not re-moved to the satisfaction of the principal officer of customs, the ship is to be surveyed by two com-

of customs, the ship is to be surveyed by two competent persons.
§ 8. Two copies or abstracts of this act shall be kept on board, one of which to be farmished by master for perusal of passengers when required.
§ 9. Every such ship carrying (except to N. America) 100 passengers, must have a medical practitioner, with the requisite medicines, on board.

§ 10. Such ships prohibited from exporting spirits.

g 11. Master to deliver list of passengers to officer of customs.

omeer of customs.

§ 12. Passengers not to be landed at place not
contracted for.

§ 13. Two children under 14 years, but above
7, or three under 7, shall be reckoned as one
person; infants under 12 months not counted.

§ 14. Unless ship detained by stress of weather,
or nown other nearwickship cause.

g 14. Unless and octament by stress of weather or some other unavoidable causes, passengers to be victualled during any detention which may take place beyond time stipulated. § 15. Passengers to be maintained for 48 hours

after their arrival.

§ 16-19. Penalties, &c.

§ 30. This act not to extend to ships carrying
passengers in cases where the number of persons,
computed as before, shall not exceed 1 for every

5 tons, nor to government ships.

§ 21. Bahamas, and places in America southward thereof, shall be deemed to be in S. America rica. See Passenores' Act-

EMPORIUM, or MART, a principal place for the importation and sale of merchandise. Such a place was formerly called a staple.

ENAMEL (Fr. Email. Ger. Schmels. It. Smallo), a kind of glass of which there are several varieties, generally opaque and coloured,—always formed by the combination of different metallic oxides, to which certain fusible salts are added, such as the borates, fluates, and phosphates. It is prepared for the use of the

painter in enamel, and for enamelling watch and clock dials, jewellery, and other articles. The best is brought from Venice in round cakes, about six inches in diameter, and half an inch thick.

ENDOWMENT, in Life Insurance, is a term applied to the assurance of a

capital sum on survivorship of time.

capital sum on survivorship of time.

ENGRAVINGS. Those who invent or engrave, or cause to be invented or engraved, works of art, maps or plans, on plates, enjoy a copyright in them for twenty-eight years from the day of publication. (8 Geo. II. c. 13; 7 Geo. III. c. 38, §§ 1, 7; 17 Geo. III. c. 57.)

ENGROSSING, the purchasing of large quantities of any commodity, in order to sell it again at a high price. [Corn.]

ENTREPOT, a place into which commodities are imported and stored, with the view of being afterwards re-exported to some other place for consumption.

ENTRY. [Customs Regulations.]

EPSOM SALTS (Fr. Sel d'Epsom. Ger. Epsom Sals), or Sulphate of Magnesia, is a well-known saline bitter medicine which derives its name from having been formerly obtained from the springs of Epsom in Surrey. It occurs native, but is usually procured from the bittern remaining after the extraction of sea-salt from seaally procured from the bittern remaining after the extraction of sea-salt from seaer; it is also largely obtained in some alum-works, and occasionally from saline springs. Besides being used in medicine, it is largely consumed for the preparation of carbonate of magnesia.

EQUATION OF PAYMENTS. When several sums of money due at different

times are owing from one person to another, it is sometimes required to find the time when they may be all discharged in one payment without injury to either party: this is called equating the payments; and the principle of the rule consists in finding the time when the interest of the sums which are deferred till after they are due is equal to the discount of those which are paid before they are due.

1. RECKONING SIMPLE INTEREST.

I. RECONTHG SIMPLE INTEREST.

Rule—Multiply each sum by the time when it is due, then divide the sum of these products by the total debt; the quotient is the time at which all the money ought to be paid.*

Example.—A sum of £500 is due on 2d March; £350 on 18th March; and £525 on 17th April; required an average time for the payment of them all in one sum?

The number of days from the 3d to the 18th of March is 16; and from the 2d March to the 17th April, 46; hence,

1,175 . .)29,750(25 days from March 2d, or March 27th nearly.

The distance of time is calculated from the 2d March, because the first sum becoming due on that day, there is no discount to calculate upon it.

2. RECEONING COMPOUND INTEREST.

2. RECOMING COMPOUND INTEREST.

Bule.—From the logarithm of the sum of all the debts subtract the logarithm of the sum of the present values of such debts, and divide the remainder by the logarithm of the amount of £1 in a year, at the given rate of interest: the quotient will be the equated time required. (Badly, p. 94.)

Example.—Suppose A were indebted to B in the sum of £750, which was to be paid in three instalments; namely, £250 at the end of 1½ year: £100 at the end of 2 years; and the remaining £400 at the end of 4 years; in what time, reckoning compound interest at 6 per cent., ought the whole to be discharged in one payment?

Here we have the sum of all the debts = 750, and the sum of their present values = 634-913963. [Interest and Annuties.] Consequently.

ERMINE (Fr. Hermins. Ger. Hermelin. It. Armellina), a species of weasel (Mustela ermines) which produces the most valuable of the furs. It is of perfeet whiteness, except the tip of its tail, which is of a brilliant shining black. The fur of the older animals is preferred to the younger. It is taken by means of snares,

* This rule is founded on the supposition that we are to find the time when the interest of the sums which are kept till after they are due, is equal to the interest, and not to the discount, of those which are paid before they are due; this, however, is not strictly correct; but since the erroneous practice universally prevails of taking the interest instead of the discount from sums which are due at a future period [Discount], the above rule is generally adopted in business as affording a near and convenient practical approximation. The substitution of interest for discount is, of course, to the advantage of the debtor.

In Mr Baily's Doctrine of Compound Interest and Annuities (p. 92), an analytical formula is given which brings out the true value for two sums; but where they are more numerous the formula becomes too complicated; and there is no rule, fit for general use, by which we can obtain the exact values when simple interest only is reckoned. Where compound interest, however, is computed, the true equated time may in all cases be determined with the greatest accuracy by the rule given in § 2.

and sometimes shot with blunt arrows. The ermine of the best quality is procured only in the cold regions of Europe and Asia. An animal called the *stoat*, a kind of ermine, is said to be found in N. America, but it is very inferior to the European and Asiatic.

ERRORS EXCEPTED. [Account.]
ESPARTO, on SPARTO, a plant (Stipa tenacissima) growing in Spain and Africa, anciently held in esteem for the manufacture of cordage, but now nearly in disuse, except in the countries of its production. It is found wild in places so barren as scarcely to produce any other spontaneous vegetation. At the present time it is used by the Spaniards for various purposes, especially in the manufacture of a kind of shoe, or rather sandal, called alpergates, much worn by the Catalans. The sparto of Africa is very inferior.

ESSENCES, either ethersous oils, in which all the fragrance of vegetable products reside, or the same combined and diluted with alcohol.

ducts reside, or the same combined and diluted with alcohol.

ESSENCE OF BERGAROT OR LEMON, the essential oil obtained from the lemon and bergamot orange, by expression of the rind. It is yellow, fluid, very fragrant, and is imported from the Mediterranean for the use of perfumers.

ESSENCE OF SPRUCE is prepared by the decoction of the branches of the fir tree. It is of the colour of treacle, but not so thick, and has a peculiar but not unpleasant taste. It is imported from America, Norway, Russia, and other countries.

ESSENCE D'ORIENT, a beautiful glistening matter obtained from the scales of a small river fish, the blay or bleak, called in French ablette, a species of Cyprinus. It is found principally at the base of the scales, and is used in the manufacture of artificial nearls.

ESTRICH (Fr. Duvet d'autruche. It. Penna matta di stronso), the fine soft down which lies immediately under the feathers of the ostrich. The finer kind is occasionally used as a substitute for beaver in the manufacture of hats; the coarser

is sometimes fabricated into a species of cloth.

ETHER, a volatile fluid produced by the distillation of alcohol with an acid.

Ethers are of different kinds, as sulphuric ether, nitric ether, &c., each being distinguished by the name of the acid by which it is formed. The most common is sulphuric

guished by the name of the acid by which it is formed. The most common is sulphuric ether, a transparent, colourless, inflammable fluid, of a very fragrant odour and hot pungent taste. It is eminently volatile, and during its evaporation it produces an intense degree of cold. Sp. gr. about 740. It is used for dissolving oils and resins, and for a variety of medical and philosophical purposes.

EUPHORBIUM (Fr. Euphorbe. Arab. Aka nafsah, Farfiyan Gholak kala), a resinous substance produced from several species of African Euphorbia, and more particularly from a kind growing on the Atlas Mountains. It is imported from Morocco, and occurs in tears or roundish and oblong masses; odour very weak, and taste at first scarcely perceptible, but afterwards acrid and corrosive. Euphorbium is a strong medicinal drug; the cathartic quality being rather too vigorous for European practice. It is said that the bark of the plant is greatly valued by the native tanners, and that to its singular effects the leather of Morocco owes its chief pre-eminence.

EXCHANGE, a term that is used in reference to those transactions by which the debts of persons residing at a distance from their creditors are liquidated without the transmission of money; being employed by merchants both to designate the bills or negotiable instruments by which transactions of this kind are conducted, and the varying price or course of such instruments in the market. The nature, constitution, and negotiation of BILLS of EXCHANGE having been already explained under that head, the present article will be devoted to an explanation of the principles by which exchange transactions are regulated; to which will be added practical formulæ for the ordinary calculations that occur is and transactions. in such transactions.

A foreign bill of exchange is an order addressed to a person residing abroad, directing him to pay a determinate sum of foreign money to the person in whose favour it is drawn, or to his order. The amount of foreign money, therefore, to be paid is fixed by the bill; but the amount of british money or money of the amount of the person of the bill; but the drawner woulded to be given for the nurchase of the bill; is by country in which the drawer resides), to be given for the purchase of the bill, is by

no means fixed, but is continually varying.

The causes which influence these variations will be best explained by tracing separately the circumstances determining the price of bills; namely, first, the value of the money in which they are to be paid compared with that with which they are bought, termed the nominal exchange; secondly, their abundance or scarcity in the market compared with the demand for them, termed the real exchange; while the combined effect of the real and the nominal exchange will be afterwards considered in treating of the computed exchange.

THE NOMINAL EXCHANGE

The coins in which the monies of account of different countries are reckoned The coins in which the monies of account of different countries are reckoned vary generally not only in denomination, but in weight and fineness, and consequently in exchangeable value. Moreover, some consist of silver, others of gold. Thus the ruble is the money integer of Russia, the guilder that of Holland, the franc that of France, and the pound sterling that of Britain. But the ruble contains nearly twice as much silver as the guilder, and the guilder about twice as much as the franc, while the pound sterling is represented by a gold coin.

The relative value of the monies of different countries is in general determined according to the quantity of pure silver or pure gold contained in the coins which form the principal media of payment, or legal tender,—alloy never being taken into account; and between two countries employing the same metal for their standard, that sum of the money of either of the two which in point of intrinsic worth is precisely count to a given sum of the other, that is, contains precisely an equal

is precisely equal to a given sum of the other, that is, contains precisely an equal weight of silver or gold of the same fineness, is usually termed the Par of Exchange.*

weight of silver or gold of the same fineness, is usually termed the Par of Exchange.* Between two countries employing the one silver and the other gold, there can be no invariable par of exchange, as the relative value of these metals is subject to fluctuation; but as this fluctuation has a very limited range, it has been customary to assume a par, founded on their average prices in the market.

In the United Kingdom, gold coin being the legal tender, there is properly no par of exchange, except with the United States, Sicily, and a few of the minor bill markets on the Continent, where the established media of payment also consist of gold. With countries or places which use silver, only an average or approximate par can be stated. In the valuations of foreign monies in the present work, this approximate par is given on the assumption that the proportionate value of gold to silver is as 1543 to 1; standard gold being estimated at its fixed mint price of £3, 17s. 10\frac{1}{2}d., and standard silver at its average market price of \(\delta \)s. per ounce.

per ounce

per ounce.

Of the two terms of comparison between the money of one place and that of another, one is fixed, the other is variable. The place whose money is reckoned at the fixed price is, in commercial language, said to receive the variable price; the other is said to give the variable price. Hence the higher the exchange between any two places, the more it is in favour of that which receives the variable price; the lower, the more in favour of that which gives the variable price; the lower, the more in favour of that which gives the variable price; the exchange being said to be favourable or unfavourable to any place, according as a smaller or larger amount of the currency of that place is required for discharging a given amount of foreign payments. Thus London receives from Paris a variable number of francs and centimes for £1 sterling; and taking the par at 25 francs 34 centimes for £1, exchange will be 5 per cent. in favour of London when it rises to 26 francs 62 centimes, and about 5 per cent. against London when it falls to 24 francs 7 62 centimes, and about 5 per cent. against London when it falls to 24 francs 7 centimes.

Supposing a par to be established, the fluctuations in the nominal price of bills drawn by one country upon another will arise principally from an alteration in the weight or fineness of the coin of either of the countries, or an alteration in the the weight or fineness of the coin of either of the countries, or an alteration in the total amount of the currency of either country, without a corresponding alteration in the commodities to be circulated. When the currency of a country is depreciated, whether from degradation of the coin, or from relative overissue, it is impossible that the same amount of it should purchase the same sum of foreign money as before its depreciation. A bill on a foreign country, being in fact an order for payment of a given sum of foreign money, will not be sold unless for such an increased amount of the depreciated currency as will counterbalance the diminution in its value; in other words, foreign bills will bear a premium in proportion to the depreciation. In the same manner, a bill on the country where the currency is

^{*} This definition of the intrinsic par of exchange, which is that given in the Report of the Bullion Committee of the House of Commons in 1810, and generally understood by merchants, is objected to by economists in so far as it does not make allowance for the difference in value of the precious metals in different countries, owing to the greater facilities enjoyed by some in procuring these metals, from their vicinity to the mines or otherwise; but the difference in value thus occasioned is in general very trifling, particularly in Europe, throughout which, according to the late M. Rottschild, gold finds its level to within it per cent; and the above is the only sense in which the term par can be employed in showing the average relative value of the currencies of different countries by comparison of their coins. For the practical purposes of the bullon merchant or exchange speculator, however, the par of the day must be carefully deduced from the market prices of the metals in the manner explained below (page 290).

depreciated will be bought abroad, where money retains its value, for a much less nominal sum than the amount for which it is drawn; or, in other words, will be at a discount.

Hence, after a par of exchange has been established, an alteration in the value Hence, after a par or exchange has been established, an atteration in the value of money, whether it arises from degradation of the coin, or depreciation of the coin or paper from relative overissue, will alike affect the price of a foreign bill, and be made evident by an unfavourable nominal exchange.

In the process of restoration of a currency, after being depreciated, it is scarcely necessary to observe that these phenomena will be reversed.

THE REAL EXCHANGE.

We now proceed to consider the manner in which the market price of bills is affected by their abundance or scarcity, compared with the demand for them on which depend the alterations of the real exchange; and as in treating of the nominal exchange, we endeavoured to preserve the subject distinct from the real exchange, by supposing the price of foreign bills to be unaffected by any variation in their abundance or scarcity; so in tracing the effect of the real exchange we shall suppose the state of the nominal exchange to remain unaltered, and that no change takes place in the value of the currencies in the respective countries.

In the commercial intercourse between two countries, when neither of them im-

no change takes place in the value of the currencies in the respective countries.

In the commercial intercourse between two countries, when neither of them imports from the other to a greater amount than it exports to the same country, the bills drawn by the merchants exporting produce will exactly equal in amount the bills drawn on the merchants importing produce, and their mutual debits and credits will be liquidated without the transmission of coin or bullion.* In this case the supply of bills being equal to the demand for them, they will neither bear a premium nor be at a discount, and the real exchange, however the nominal exchange may after will be at par

change may alter, will be at par.

But it seldom or never happens that the exports and imports are so exactly equal as to leave no balance. When the imports are in excess, and more payments have to be made than received, the importer, rather than incur the expense ments have to be made than received, the importer, rather than incur the expense of transmitting coin or bullion, will be induced to give more for a bill of exchange upon a party in the creditor country than the sum for which it is drawn. A competition will thus be created among the purchasers of bills upon the creditor country, and the holders will refuse to part with them, except an additional price be given as a premium in proportion to the demand. In the creditor country, on the contrary, there will be more persons holding than there are wanting bills, and the excess above the demand can only be converted into coin or bullion by sending them to the place upon which they are drawn. But this operation involving the expense and risk attending the transit of the bullion, the holder of a bill on the creditor country, if he be desirous of converting it into money, will be content to receive something less than its amount. There will therefore be in the creditor country a competition to sell, and bills will be at a discount in proportion to the receive something less than its amount. There will therefore be in the creditor country a competition to sell, and bills will be at a discount in proportion to the country a competition to sell, and bills will be at a discount in proportion to the supply. The premium in one country will correspond with the discount in the other. But neither the premium nor the discount can for any long time exceed the expense of transmitting bullion, which therefore forms the natural limit to the fluctuations of the real exchange between any two countries.

The transit of bullion, however (unless from countries producing the precious metals), rarely occurs except in small quantities: international accounts are never closed; and various facilities exist for warding off such a state of things as would take place if a periodical settlement were enforced as in accounts between individuals.

1st, The tendency of an unfavourable state of the real exchange is to stimulate exportation and check importation. Commedities which would only just pay with exchange at par, would yield a profit sufficient to induce exportation, where the exporter could secure 1 or 2 per cent. more for the draft upon his foreign debtor. On the other hand, an imported commedity which was only just paying

^{*} The balance of trade and the balance of payments are here assumed to be identical,—a supposition true in the general case, and convenient for illustration. When, however, two countries sell to each other on unequal terms of credit, these two balances may be materially different; and, as it is by the balance of payments that the market rate of exchange is regulated, their distinction must be borne in mind,—more especially in reference to the exchanges of this country, in which the exporters almost invariably allow a much longer credit than is received by the importers. The balance of trade between the United States and Great Britain is believed to have been in favour of the latter from the date of planting the first British colony in America,—of late years to the amount sometimes of one hundred millions of dollars or upwards; yet, owing to the longer credit allowed by our traders, the exchange has not always been in our favour, but, on the contrary, has been so controlled by the balance of payments as frequently to have been against us.

EXC 285 EXC

when exchange was at par, would cease to yield a profit sufficient to induce importation when the importer should have to pay a premium for a foreign bill if he remit one to his foreign creditor, or a discount added to the invoice price if his creditor draws upon him. Thus, by the stimulus to exportation the supply of bills would be increased, while by the check to importation the demand for those bills would be lessened; both causes operating to restore the exchange to its natural level or par. In the same manner, a favourable exchange will act as a duty upon exportation, and as a bounty upon importation. In the case of the nominal exchange, however, these effects would not be produced, as the same fall in the value of the currency which renders the exchange unfavourable, and cause foreign bills to sell at a premium, must increase in an equal degree the price of sale commodities: to sell at a premium, must increase in an equal degree the price of all commodities; and vice versa.

and vice versa.

In exporting during an unfavourable state of the exchange, it is plain that the merchant will, as in the ordinary conduct of his business, select those commodities which, besides the premium afforded by his bill, will give him the greatest profit by the difference of price abroad and at home; and it is not difficult to see that these exports must generally consist of consumable produce, and not bullion, which of all commodities is that which is subject to the least variation in its read price. "The annual quantity produced from the mines is very nearly constant,—its distribution, from the facility with which it is transported, is exceedingly uniform,—and its value, and consequently its real price, throughout Europe at least, must be considered as nearly the same. Unless then the bounty afforded by the unfavourable state of the real exchange were greater than the expenses attending the transit of bullion, it would be of all others the commodity least likely to be

unfavourable state of the read exchange were greater than the expenses attending the transit of bullion, it would be of all others the commodity least likely to be selected by the exporting merchant." (Blake on Eschange, p. 21.)

2d. This natural tendency of the exchange to correct itself is promoted by the operations of the bill merchants, who study the exchanges, not only between the place at which they reside and all other places, but also between all those other places themselves, by which means they are generally enabled to realize a profit by buying bills in one place and selling them in another;—in this way preventing any great fall in the price of bills in those countries in which the supply exceeds the demand, and any great rise in those countries in which the supply exceeds the deficient. Sometimes exchange operations are conducted with little outlay of capital. Thus, if a bill merchant in London can sell a bill on Amsterdam at half per cent. premium, and buy one at Paris at half per cent. discount, and with the latter buy one at Paris on Amsterdam at par, he will have gained 1 per cent. by the transaction, without the employment of any capital;—the bill remitted from Paris to Amsterdam arriving in time to meet the bill drawn there upon his correspondent. Again, a bill merchant, in order to take advantage of a premium rrom raris to Amsterdam arriving in time to meet the bill drawn there upon his correspondent. Again, a bill merchant, in order to take advantage of a premium on the exchange, may obtain a credit abroad upon which he may draw bills, under the calculation that at some future and not very distant period he will be able to replace the funds at a lower rate of exchange, and thereby realize a profit by the operation. The central points for such transactions are Hamburg, Amsterdam, Vienna, Paris, New York, and above all, London, the great money change of the world. the world.

3d, A variety of other expedients are also occasionally adopted, particularly in the United States, where the extension of credits by the consent of the foreign creditors upon allowing interest for the extended term, and the transmission of public securities, bank, railroad, and canal shares, are all well known levers in the mechanism of trade, by which the tendency of an unfavourable balance of payments

chanism of trade, by which the tendency of an unfavourable balance of payments to cause an exportation of bullion is frequently neutralized.

4th, When all these measures fail in keeping down the price of bills, and the premium exceeds by a very small amount the expenses of the transit of bullion, its exportation will immediately commence; for the same uniformity of value and of price which, as already noticed, would prevent bullion being exported before the premium exceeded those expenses, would be the very cause why, as soon as the premium had exceeded that point, it would be immediately chosen as the most eligible for exportation, more especially in the greater exchange markets, where the bullion merchants are generally distinguished for intelligence, large capital, and the small profits upon which they transact their business. The foreign debt will then begin to be paid by the bullion merchants exporting to take advantage of the premium, and their competition will soon bring down the real exchange so as no longer to afford a profit upon the export of this article. The exporters of consumable produce will, during this period, co-operate with the bullion merchants; and when the latter have ceased to derive a profit, the former will still

continue their operations, till the exports have been such as to counterbalance the adverse debt, and render the quantity of foreign bills in the market equal to the demand.

the adverse debt, and render the quantity of foreign bills in the market equal to the demand.

5th, Only a small part, however, of an unfavourable balance can be liquidated by the transit of bullion, as its exportation cannot take place to any considerable degree without affecting the market price of that article itself;—raising it in the country from which it is sent, and reducing it in that into which it is flowing; so that if, in the first instance, the difference of price in the home and foreign market were but just sufficient to induce the bullion merchant to export, it is clear that after the change has taken place, the exportation of bullion under the same rate of exchange will cease. "The transit of bullion," says Mr Blake, "from a high or low real exchange is an unnatural transit, not arising from the wants of the country into which it flows, but depending solely on the profits which a temporary pressure for foreign payments affords to the bullion merchants on the sale of foreign bills; and as soon as the cause that has produced the temporary influx subsides (an event that will sooner or later necessarily take place by the import of such ordinary produce as is wanted for the purposes of consumption, and increased enjoyment of the people), the superfluous and unused quantity of bullion that has been accumulated will flow back from the country where its abundance has rendered its real price low, to those nations from which it had been unnaturally sent, and where its scarcity will have rendered its real price high." (P. 33.)

Hence it appears, that whenever there is a balance of payments due by a country, the real exchange will become unfavourable, and the price of foreign bills will bear a premium, and vice versa; that the natural limit to the amount of this premium is the expense of the transit of bullion; and before it has arrived at that point, the expent of ordinary produce will be foreed, and its import restrained; so that the expense of the transit of bullion; and before it has arrived at that poin

export of ordinary produce will be forced, and its import restrained; so that the real exchange can scarcely begin to deviate from par, without calling into action a principle that will correct its deviation.

THE COMPUTED EXCHANGE.

The computed, or actual course of exchange, depends on the combined effect of the nominal and real exchange. These being perfectly independent of each other, it is obvious that if both are favourable, or both unfavourable, the computed exchange will denote their sum; that if the one is favourable while the other is unfavourable, it will express their difference; and that it may be at par, though neither the real nor the nominal exchange are so, provided the unfavourable state of the one be counteracted by the favourable state of the other. The state of the exchange at any particular period is best ascertained by a comparison of the market with the mint price of bullion;—the excess of the former above the latter affording in general an accurate measure of the depreciation of the currency. Thus, if the market and mint price of bullion at London and New York exactly ket with the mint price of bullion;—the excess of the former above the latter affording in general an accurate measure of the depreciation of the currency. Thus, if the market and mint price of bullion at London and New York exactly corresponded, and if the value of bullion were the same in both places, the nominal exchange would be at par, and whatever variations might occur in the computed or actual course of exchange, would have to be referred to fluctuations in the real exchange, or in other words, in the demand and supply of bills. But if, when the market price of bullion in London is equal to its mint price, it exceeds it 10 per cent. in New York, this proves that New York currency is depreciated 10 per cent, and consequently the nominal exchange between London and New York must be 10 per cent. against the latter. Again, if while the value of New York currency was 10 per cent. less than the value of British currency, the computed or actual course of exchange between London and New York was 12 or 13 per cent. against the latter, it would show that the real exchange was also against New York to the extent of 2 or 3 per cent.: On the other hand, if the computed exchange was only 5 or 6 per cent against New York, it would show that the real exchange was 5 or 4 per cent in its favour.

The oscillations of the exchange are now unimportant compared with what they were during the last war, when most of the European governments resorted to inconvertible paper money, which, by its overissue and consequent depreciation, disturbed the nominal exchange, while the real exchange was generally more or less influenced by remittances for the maintenance of troops abroad, or on account of foreign subsidies. At present the rates in Wetenhall's "Course of the Exchange," given below, are all expressed in currency, either metallic, or directly convertible into metallic money, except those on Rio Janeiro, Bahis, and Buenoe Ayres, where it consists almost entirely of depreciated paper; the currencies of

EXC 287 EXC

Denmark, Sweden, and Norway consist chiefly of depreciated paper, but these countries have seldom a direct course with London, their exchange business being generally transacted in banco through the medium of Hamburg. The real exchange is now also, in ordinary times, maintained with considerable steadiness; the chief fluctuations to which it is liable arising from the effects of favourable or unfavourable seasons on the customary produce of the land. In this country a deficient harvest, actual or anticipated, leads directly to a demand for bills on the foreign wheat ports, and indirectly to a demand for paper upon all places which hold commercial intercourse with such ports, or through which remittances may be made. The unfavourable exchange thus produced, occasions commonly an exportation of bullion; but it is evident, on the principles already explained, that this efflux can be only of limited amount and temporary duration. this efflux can be only of limited amount and temporary duration.

Besides the circumstances now explained, the price of a bill will of course be influenced by the credit of the parties to it, and by the time which it has to run. In the actual negotiation of bills, however, any small difference of time is not taken into consideration,—a bill at 90 days' date frequently bringing as good a price as one at 75 days' date. Short bills, that is, bills at sight, or at short sight, which is generally 3 days' sight, do not usually bear a price higher than long-dated bills, proportional to the interest for the difference of time, as the latter are preferred for exchange speculations, from their affording an opportunity to wait, if it should be judged expedient, for an improvement in the rate.

In this country the buying and selling of bills on foreign countries is conducted by brokers, all such transactions centring in the metropolis. In London the days for the negotiation of foreign bills are Tuesdays and Fridays, the Foreign post-days. The brokers go round to the principal merchants, and discover whether they are buyers or sellers; and a few of the more influential, after ascertaining they are buyers or sellers; and a few of the more influential, after ascertaining the state of the market, suggest a price at which the greater part of the transactions are settled, with such deviations as particular bills may be subject to from their high or low credit. For the bills they buy on one post-day, houses of established credit pay on the following post-day, when they receive the second and third bills of the set;—foreign bills being usually drawn in sets of three. The brokerage charged on bills is 1 per mille, or ',th per cent.

On the evenings of Tuesdays and Fridays, the market rates for bills on all the principal foreign cities, with the current prices of bullion, are published in Wetenhall's "Course of the Exchange," from which the following is extracted:—

COURSE OF EXCHANGE, LUNDON, APRIL 15, 1862. 11 184 Florins and Stivers for £1.
11 155 Florins and Stivers for £1.
11 185 Florins and Stivers for £1.
25 47 Florins and Stivers for £1. Antwerp Marks and Schillings Banco for £1.

Marks and Schillings Banco for £1.

Francs and Centimes for £1.

Francs and Centimes for £1. Altona
Paris, 8 days' sightshort 20 50 50 50 Ditto 8 m/d. Francs and Centimes for £1. Francs and Centimes for £1. Bordeaux Prankfort (Maine) Kreusers for £1.

Dollars and Groschen for £1.

Florins and Kreusers (offective) for £1.

Florins and Kreusers for £1. Trieste Tuscan Lire and Centesimi for £1. Lire Austriachi and Centesimi for £1.
Pence for 6 Lire Austriachi
Pence for 1 Nespolitan Ducat.
Pence for 1 Concia.
Pence for 1 Dollar of Plate.
Pence for 1 Dollar of Plate. Milan Venice Madrid Pence for 1 Dollar of Plate. Pence for 1 Hard Dollar, Pence for I Hard Dollar, Pence for I Milreia Pence for I Silver Ruble. Pence for I Silver Ruble. Pence for I Paper Milreia. Pence for I Paper Dollar. Pence for I Dollar. Oporto.....

Paics of Bullion.—Foreign gold in bars (standard), per ounce Silver in bars (standard) £3 17 9 0 5 11

When the exchange becomes more favourable to London, the foreign rates in the upper part of the list will rise, the sterling rates in the lower part will fall; when the exchange becomes less favourable, the former will fall, the latter will rise. Again, the tendency of bullion is to fall in price as the exchange becomes favourable, and to rise as it becomes unfavourable.

The principles now explained are all applicable to

favourable, and to rise as it becomes unfavourable.

THE INLAND EXCHANGE.—The principles now explained are all applicable to the inland exchange; but, in the United Kingdom at least, the uniform value of the currency renders unnecessary any comparison between the value of the money at the place where the bill is drawn with its value at the place where it is to be paid; while the constant intercourse maintained between the different parts of the country prevents those fluctuations which occur in the market price of foreign bills. Inland remittances are generally conducted by bankers, who, by having credits in London and other cities, are enabled on all occasions to supply the demands of their customers. The great centre of the inland as well as of the foreign exchange is London, occasioned partly by its immense commerce, and by its currency consists. is London, occasioned partly by its immense commerce, and by its currency consisting of Bank of England paper, for which the notes of the country banks are rendered exchangeable, but chiefly by its being the seat of the government, and the place to which the revenue is remitted. Owing to these circumstances, the exchange between the capital and the other parts of the kingdom is invariably in its favour. between the capital and the other parts of the kingdom is invariably in its favour. The premium for bills on London, or rather letters of credit, the form in which inland remittances are now chiefly made, is usually commuted for a fixed period of time, termed the Par Date. The par date for remittances to London from Edinburgh or Glasgow (exclusive of the 3 days of grace), is 20 days; while in London, bills or letters of credit on these places are commonly granted without charge. In Liverpool, the banks draw on London at 21 days' date; sometimes also at 7 days' sight, charging 1 per cent. of commission. In Dublin and Belfast, bills on London are drawn at 21 days' date, and letters of credit are granted for a premium of 1 per cent. premium of a per cent.

FORMULÆ FOR EXCHANGE CALCULATIONS.

The rules for performing exchange calculations having been already fully explained, under the head Chain Rule, we shall here confine ourselves merely to a selection of formulæ; giving, in the first place, those applicable to direct remittances, and afterwards a few examples in indirect exchanges and bullion operations.

DIRECT EXCHANGES.

LONDON ON AMSTERDAM. Exchange 19 fl. 44 stivers 1000 florins 20 stivers. £1. 9444 stivers Or what is the same; Exch. 12 fl. 22; cents. 1000 florins? 1 florin = 100 cents 1929 cents = £1. Anseer. 1000 florins = £81, 16s. 100 cents.

LONDON ON PARIS. Exch. 25 fr. 65 cts. 1000 francs? 1 franc = 100 cent 2565 cents = £1. Ans. 1000 francs = £38, 19s. 84d. 100 cents.

LONDON ON HAMBURG. Exch. 13 mks. 12 schill. Box. 1000 marks Box.? 1 mark B∞. = 16 schillings. 220 schillings = £1. Ans. 1000 B∞ marks = £72, 14s. 6åd. 1 mark Bos. =

LONDON ON LUBEC. | LONDON ON LUBEC. | Second Se AMSTERDAM ON LONDON.

Exchange 11 fl. 95 cents. £100? 1195 cents. 1 florin. = 100 cents = 1 Anneer. £100 = 1195 florins.

N.B. The stiver is retained in the London, but not in the Amsterdam course of exchange.

PARIS ON LONDON.

Exch. 25 fr. 10 cta.
£100?
£1 = \$510 cent £1 100 cents Ans. £100 = 2510 francs. 1 franc.

HAMBURG ON LONDON.

Breh. 13 mis. 7 schill. Bes.
£100?
£1 = 215 schillings.
16 schillings = 1 mark Bes.
£100 = 1343 marks 12 schill. Bes.

LUBEC ON LONDON.

Exch. On Hamburg, 13 mks. 8 schill. B =
On Lubec, 23 per cent.

£100?

216 schill. B 16 schiff, Ben = 1 mark Ben 100 m crks Ben = 123 cur. marks. Ans. £100 = 1667 cur. mks. 4 schill.

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LONDON ON VIENNA.

Ruch. 10 florins 4 kreusers.
1000 florins 7
1 florin = 60 kreusers.
                                                                                                                                                                         VIENNA ON LONDON.
Exch. 9 florins 48 kreusers.
£100?
1 = 588 kreuser
                                                                                                                                                                                                                      588 krane
      604 kreusers = £1.
Ans. 1000 fl. = £99, 6s. 9d.
                                                                                                                                                 60 kreusers = Ans. £100 = 980 florins.
                                                                                                                                                                                                                           i florin.
      LONDON ON VENICE.

Exch. 47 pence.
1000 Lire Aus. ?
6 Lire Aus. = 47 pence.
240 pence = £1000 Lire Aus. ?
6 Lire Lire Aus. = £32, 12s. 9id.
                                                                                                                                                                        VENICE ON LONDON.
                                                                                                                                                                                       Exch. 48 pence.
£100?
                                                                                                                                                 £1 = 240 penc
48 penca = 6 Lire
Ans. £100 = 3000 Lire Austriache.
                                                                                                                                                                                                                           240 pence.
6 Lire Aus.
      LONDON ON MILAN.

Exch. 31 Lire Austriacht.

1 Lira Aus. = 100 centesimi.

3100 cont. = £1.

Ans. 1000 Lire Aus. = £35, 5a, 3d.
                                                                                                                                                 MILAN ON LONDON.
Exch. 29 Lire 30 cents Aus.
£100?
£1 = 2930 centesim.
100 cent. = 1 Lira Aus.
£100 = 2930 Lire Austriachi.
                           LONDON ON NAPLES.
Exch. 41½ pence.
1000 dueats?
1 ducat = 41½ pence.
40 pence = £1.
                                                                                                                                                                        NAPLES ON LONDON.
                                                                                                                                                240 pence = £1.

Ans. 1000 ducats = £171, 17s. 6d.
                             LONDON ON LISBON.
Exch. 544 pence.
1000-2000 ?
                                                                                                                                                                        LISBON ON LONDON.
                                                                                                                                                                                      Exch. 57 pence.
£100?
= 240 p
      1 $5000 = 544 pence.
240 pence = £1.
Ans. 1000 milreis = £228, 2s. 6d.
                                                                                                                                                £1 = 57 pence = 4ns. £100 = 421 $053.
                                                                                                                                                                                                                        240 pence.
1 2000.
                                                                                                                                                                     LONDON ON BERLIN.

Exch. 7 Pruss. dol.

1000 P. D. ?

1 Pruss. dollar = 30 groschen.
210 groschen = £1.

Ans. 1000 P. doll. = £142, 17s. 1 {d.
                                                                                                                                                30 groschen = 1 Pruss.

Ans. £100 = 680 Prussian dollars.
            LONDON ON ST PETERSBURG.
                                                                                                                                                        ST PETERSBURG ON LONDON.
                                                                                                                                                                                      Exch. 38 pence.
£100?
                                         Exch. 37 pence.
1000 rubles?
      1 ruble = 37½ pence.

240 pence = £1 sterling.

Ans. 1000 rubles = £156, čs.
                                                                                                                                                                                                                          240 pence.
1 ruble.
                                                                                                                                                 38 \text{ pence} = 1 \text{ rubl}
Ans. £100 = 631 rubles 58 copecs.
                                                                                                                                                                     PALERMO ON LONDON.
                        LONDON ON PALERMO.
      LONDON ON FALERMO.

Exch. 123 pence.
1000 oncie?

1 oncie = 123 pence.
240 pence = £1 sterling.

Ans. 1000 oncie = £512, 10s.
                                                                                                                                                                                          Exch. 60 tari
                                                                                                                                                                                                                        £100?
                                                                                                                                                                        £1
                                                                                                                                                                                                        =
                                                                                                                                                                                                                                60 tari.
                                                                                                                                                30 tari = 4ns. £100 = 200 oncie.
                                                                                                                                                                                                                                   l oncie.
                           LONDON ON MADRID.
Exch. 37 pence.
1000 Reals v.?
                                                                                                                                                                      MADRID ON LONDON.
                                                                                                                                                                                       Exch. 36 pence.
      32 Reals vellon :: 17 Reals plate.
8 Reals plate :: 37 pence.
940 pence :: £1 sterling.
Multiply by the rate and by 17, and divide by
                                                                                                                                          £1 = $40 pence.

$6 pence = $8 Reals plate.

17 Reals plate = $2 Reals vellon.

Multiply by 61440, and divide by the rate
multiplied by 17.

Ass. £100 = 10039 Reals v. 7 maraved.
61440.
     Ans. 1000 Reals v. = £10, 4s. 9d.
                        LONDON ON LEGHORN.
Exch. £ T. 30, 60 cents.
                                                                                                                                                                  LEGHORN ON LONDON.
Exch. £ T. 30, 10 cents.
                                                                                          1000 Lire T. ?
                                                                                                                                                                                                                           £100?
3010 cents.
             1 Tuscan lira
                                                                                                                                                      £1 sterling
                                                                                             100 cents.
                                                                                                                                                                                                     =
                                                                                                                                                100 cents = 
Ans. £100 = £ T. 3010.
    3060 cents = £1.
Ans. 1000 Lire T. = £32, 13s. 7d.
                                                                                                                                                                                                                                     1 Tuscan Lira.
                     LONDON ON NEW YORK.
Exch. 114 per cent. Premium.
$1000?
114 less prem. = $100.
0 = £9 sterling.
                                                                                                                                                               NEW YORK ON LONDON.
Exch. 73 per cent. Premium.
£100?
      $1111 less prem. = $40 = £201, 15s. 101d.
Exch. 461 pence.
$1000?
                                                                                                                                                £9 sterling = $100 plus prem. = $10. £100 = $477.78 cts. Exch. $4.80 cts. £1
                                                                                                                                                                                                                           $1071.
                                                                                                                                                                                                                          £100?
      $1
240 pence = Ans. $1000 = £193, 15s.
the two examples of the two examples of the samples of th
                                                                            461 pence.
£1 sterling.
                                                                                                                                                       £1 sterling
                                                                                                                                              100 cents

Ans. £100 = $480.
In the two examples of the premium method, given above, the fixed par of 4s. 6d. per dollar is expressed in the equivalent proportion, £9 = $40, according to usage in exchange calculations.
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LONDON ON MONTREAL
                                                                                                                                                                                MONTREAL ON LONDON.
                             Exch. 171 per cent. premium.
£1000 currency?
                                                                                                                                                                                   Exch. 15 per cent. Pre
                                                                                                                                                             £9 sterling
£100 currency,
                                                                                                                                                                                                                                                      £100 sterling?
       £117, 10s. currency, }
                                                                                                                                                                                                                                                        £10 currency.
                                                                                                £100 currency.
        less prem. £10 currency. £20 sterling.

Ans. £1000 currency = £765, 12a. 2d. sterling.
                                                                                                                                                                                                                                                      £115 currency.
                                                                                                                                                             plus prem. = £115 currency.
Ans. 100 sterling = £127, 15s. 7d. currency.
                             LONDON ON JAMAICA.

Ruch. 18 per cent. Premium.

£1000 currency?
                                                                                                                                                                                   JAMAICA ON LONDON.
Exch. 15 per cent. Premium.
                                                                                                                                                                                                                                             Premium. £100 sterling?
       £118 currency, }
                                                                                                                                                            £5 sterling
£100 currency,
                                                                                            £100 currency.
               les prem.
                                                                                                                                                                                                                                               £115 currency.
        £7 currency = £5 sterling.

Ans. £1000 currency = £605, 6s. 64d. sterling.
                                                                                                                                                            plus prem. = £115 currency.

Ans. £100 sterling = £161 currency.
Aiss. £1000 currency = £605, ës. 64d. stering. | Aiss. £100 stering = £161 currency.

INDIRECT EXCHANGES, OR ARBITRATIONS OF EXCHANGE.

Arbitration of Exchange is the operation of finding a proportional rate between two places, through any intermediate place or places, in order to ascertain the most advantageous method of drawing or remitting. When there is only one intermediate place, it is said to be a $Simple Arbitration, when more than one, a Compound Arbitration are included in the said to be a $Simple Arbitration are included in the said and the said arbitrated rates, in order to find whether any indirect paper affords a better rate than direct paper,—allowance being made for the difference of interest or discount between the direct and indirect bills, and the additional charges attending the latter, as brokerage, stamps, and commission. The commission to an agent varies from about it to i per cent. according to agreement; but the small rate of profit yielded by exchange speculations leads to their being chiefly conducted on joint account, or between branches of the same establishment, so that the charge for commission is generally avoided.

LONDON AND PARIS. THROUGH LONDON AND AMSTERDAM. THROUGH LONDON AND AMSTERDAM. THROUGH INDIRECT.
```

290

centimes for 100 marks Banco.

220 schillings Banco. 1 marc Banco. 16 schillings = 1 marc 100 marcs Banco = 18450 cents. 100 cents = Ans. 25 france 37 cents. 1 franc.

LONDON AND PARIS, THROUGH
HAMBURG.
Find the Arbitrated Rate between London and Paris, when the exchange of London on Hamburg is 13 marks 12 schillings Banco for £1; on Madrid is 37 pence for 1 dollar of plate; and and that of Paris on Hamburg, 184 france 50 that of Amsterdam on Madrid 100 florins 75 cents for 100 marks Banco. for 40 ducats of plate.

£1? 940 pence. 1 dollar plate. £1 = 37 pence = 1 dollar plate = 375 maravedis = 40 ducats = 100 cents = 4.0 t florins 85 cents. 272 maravedia. 1 ducat 10075 cents. 1 florin.

In the Simple Arbitrations now stated, although the exchange is said to be through a third place, yet it is commonly effected by the remittance of bills upon the intermediate place, to the place where the fund is to be created;—as, for example, by the purchase in London of bills upon Hamburg, and the remittance of such bills to Paris; this operation being less complicated, and attended with fewer charges than remitting direct paper to Hamburg, and either having the proceeds forwarded to Paris, or ordering the correspondent there to draw for them upon Hamburg.

Compound Arbitrations are of rare occurrence, as the liability to unfavourable changes becomes greatly increased when more than three places are concerned in the operation; besides, few houses of business are capable of so far extending their negotiations.

ARBITRATIONS OF BULLION.

ARBITKATIONS OF BULLION.

Arbitration of Bullion is the operation of deducing a rate of exchange from the prices of bullion in two places, in order to determine, by comparison with the rate borne by bills, whether the precious metals can be exported or imported to advantage. The data required, besides the prices, are the weight and fineness of the bullion;—the modes of expressing which, in this and other countries, are explained under Measuras and Weights, and the heads of those countries respectively. In the following equations the variable terms are distinguished by an asterisk; the others, being invariable, are in each case compounded into a fixed number which may be used in all similar arbitrations. The result of the equation for New York is shown, both according to the new and the old methods of quoting the exchange.

LONDON AND NEW YORK.

LONDON AND AMSTERDAM.

Bur gold in London is 77s. 9d. per ounce stand—

Rest gives in London is 60.

LONDON AND NEW YORK.

Bar gold in London is 77s. 94, per ounce standard; required the arbitrated rate of exchange produced by its export to the United States, for required the arbitrated rate of states, for required the rate of 232½ grains of fine gold for the eagle of \$10.

C1 standard 70 Methods 1000 wigties, and 31 1002 wigties equal 1 troy ounce.

£1 sterling	=	20 shillings.
*77% shillings	=	480 grains stand.
12 grains stand.	=	11 grains fine.
\$32] grains fine		\$ 10.
77	1)378.98	
Ans.	\$4.87	.43 per £1 sterling.
		900
	40)4396-6	
	1094	per £100 ster.
or	91 per c	cent. Premium.

```
£1 sterling?
 £1 sterling
*60 pence
40 oz. standard
                                    240 pence.
1 oz. standard.
                         = 37 oz. fine.
= 31·1002 wigitios.
= *104 florins.
1000 wigties
                      60)6-9(494
                                         Fixed No.
                             ·115070
 Multiplied by
 Ans.
                    Florins 1202 cents.
```

The arbitrated rates thus found, however, will fall to be corrected for interest and charges, sfore being compared with the prices of bills.

EXCHEQUER, a court established in England by William the Conqueror, and which anciently was one of the first in importance, as all causes relating to the

EACHEQUER, a court established in England by William the Conqueror, and which anciently was one of the first in importance, as all causes relating to the rights of the crown were there discussed, and the royal revenues were supposed to be received there. As now modified, it consists of two divisions, one of which possesses jurisdiction in matters of public revenue, while the other is subdivided into a court of common law and a court of equity. The judges are, the Chancellor of Exchequer for the time being, the Chief Baron, and four other Barons. The Chancellor has a voice in giving judgment when the court its in equity, but it is now rarely or never exercised, his leading duties at present being those of the public finance, of which he is minister. In this last capacity he is always a leading member of the cabinet.

EXCHEQUER BILLS are promissory notes issued by the Treasury under the authority of Parliament; and are the form in which the floating or unfunded part of the national debt chiefly exists. The issue of these bills greatly facilitates the current financial business of the government. They are circulated at present for sums varying from £100 to £1000, which are printed with ink of different colours; namely, £100 bills with red; £200, yellow; £500, blue; and £1000 bills with black ink. They bear interest from their date until the day fixed for their payment, which is announced by advertisement, and is generally about a year after being issued, when they are either discharged or renewed for other bills, at the option of the holders. Parties neglecting to present their bills on the day appointed are deprived of interest till the next opportunity of obtaining new bills, or else must submit to the loss of whatevar premium they may chance to bear at the time. holders. Parties neglecting to present their bills on the day appointed are deprived of interest till the next opportunity of obtaining new bills, or else must submit to the loss of whatever premium they may chance to bear at the time. During the currency of these bills, they may, after a limited time, be paid to the government at par in discharge of duties and taxes; they are thus nearly exempt from the risk of depreciation, and, as they are transferable without the necessity of a formal assignation, they form an eligible investment for capital that may require to be suddenly made available. They are so much in demand by capitalists in the metropolis, that covernment is analysis. made available. They are so much in demand by capitalists in the metropolis, that government is enabled to keep a considerable amount of them, generally about £28,000,000, in circulation, at a low rate of interest. The rate is fixed at so much per cent. per diem, and is commonly adjusted so that the bills shall bear a premium in the market, in order that government may not be exposed to the inconvanience of having them returned in payment of taxes. Sometimes the small bills a higher premium than the large ones. Of late years the rate has fluctuated in light to 23d, per cent. per diem, that is, from £2, 5s. 73d. to £3, 16s. 03d. per cent. per annum.

cent. per annum.

The brokerage upon either a purchase or a sale is 1s. per cent.

Transactions through the medium of Exchequer bills generally involve a calculation of interest and premium. Thus,

To find the cost of an Exchequer bill for £500, dated January 5, and sold April 6, at 60s.

premium, we have

£500 = 3 15 10 Interest = 15 0 0 Premium 0 5 0 Brokerage £500 at 2d. per cent. is 10d.: and 10d. × 91 days = 60s. × 5

£519 0 10 Whole cost.

These securities are issued at the Exchequer Bill Office, Palace-Yard, West-

minster. [Funds.]
EXCISE, a term applied in this country to the duties levied on articles of home EXCISE, a term applied in this country to the duties levied on articles of home manufacture or production. Such duties were unknown in England before the year 1643, when they were imposed by the Long Parliament upon beer, ale, cider, perry, and other commodities. This kind of taxation long continued unpopular. Marvel describes the excise as "a hateful tax;" and Blackstone states, that, "from its first original to the present time (1765), its very name has been odious to the people of England." These opinions may have partly arisen from the harsh and inconsiderate manner in which the duties were sometimes levied; but there will always he clamourers against even beneficial innovations. Eaw persua however. always be clamourers against even beneficial innovations. Few persons, however, are now disposed to call in question the advantage of contributing towards the are now disposed to call in question the savantasgo of contributing lowarus the necessary expenses of the country by means of an indirect tax, though this is an advantage which may be purchased at too dear a rate, if great care be not taken in the construction of statutes which give such large powers as the excise laws. The excise was at first only intended to be resorted to as a temporary source of revenue, but, like many other taxes, it was retained when the emergency in which it originated had passed away. In 1649, the Parliament declared that "the impost

of the excise was the most easy and indifferent levy that could be laid upon the people;" and by the 12th Charles II. c. 24, it was granted as part of the revenues of the crown. The malt duty was first imposed in 1695; and during the reigns of William III. and Queen Anne, the list of articles subject to the excise comprised nearly all those which were liable at the close of the last century. In 1797, the number was 27; in 1833, they were reduced to 15; and in 1837, to 10, their present number; either by the duty having been totally repealed, or (as in the case of tea, ococa, coffee, pepper, foreign spirits, tobacco, snuff, and wine) by being transferred to the department of the customs, which is enabled to collect the revenue with greater conomy and convenience. The articles from which the excise revenue is at present derived are, Aucrions, Bricks, Glass, Hops, Licenses, Malt, Paper, Soap, Spirits, and Vinegar; and under these heads, and those of Tarips, and Revenue and Expenditure, an account will be found of the different duties and their produce.

The persons subject to excise survey may be divided into five classes:—1. Persons visited for the purpose of charging the "growing" duties, as brickmakers, maltsters, papermakers, and others. 2. Persons whose license is high or low according to the extent of their consumption, as brewers and tobacco manufacturers.

3. Persons visited because subject to a license for dealing in articles upon which

3. Persons visited because subject to a license for dealing in articles upon which excise duty has or ought to have been paid, as innkeepers, and retailers of beer or spirits.

4. Persons visited in like manner because subject to a license for dealing in articles chargeable with customs duty, as dealers in tea, wine, and tobacco.

5. Persons from whom no duty is collected, as tallow-melters (as a check on scap-making), and a few others. The total number of parties surveyed in the United

Kingdom is about 600,000.

Kingdom is about 600,000.

The Board of Excise is a sub-department of the Treasury, and as such is subject to its check and control; the First Lord of the Treasury and the Chancellor of Exchequer being the really responsible parties. It consists of seven commissioners who have equal authority and power. The chairman has a salary of £2000, the deputy-chairman £1500, and the other commissioners have each £1200 per annum. The board is responsible for the general discipline of the service, amounting to about 7000 individuals. They appoint to offices, and pay the parties such sums as are necessary; but the number of each description of officers is not allowed to exceed that fixed by general warrant or order from the Treasury. Since 1823 the Irish and Scottish boards have been consolidated with the sury. Since 1823 the English establishment.

To facilitate the labours which devolve upon the excise department, the country To facilitate the labours which devolve upon the excise department, the country is partitioned into convenient portions, known under the name of "collections;" the number of these in England and Wales being 55. The name of a county, a large portion or the whole of which is comprised within its limits, is given to some collections; others are known by the name of some great town which they contain. Each collection is divided into districts, usually into six or seven. Each district again is subdivided into rides and footwalks; the former comprises a tract of country in which the traders are thinly scattered, and the surveying officer is

required to keep a horse; the latter never exceeds a circuit of 16 miles.

The chief officer of each collection is the collector, who is allowed a clerk; and in two or three collections more than one clerk is required. The officer next in no two or three collections more than one cierk is required. The officer next in point of rank is the supergisor, who is in charge of a district; and afterwards come the ordinary surveying officers. There is always one supernumerary in each collection, and in many there are officers called assistants and expectants. The salaries of collectors vary from £350 to £550, the general rate being £400 a-year. The salary of supervisors is £200; of officers, £100; of assistants, £85; of supernumeraries, £52; of collectors' clerks from £115 to £150; of expectants £50 a-year. When these lest are superjuved as officers that receive an additional allows. when these last are employed as officers, they receive an additional allowance at the rate of £30 a-year; and supernumeraries in like manner receive an addition of £38 a-year. The collectors find security to the amount of £5000; supervisors provide a bond of £1000; and all other classes in the service give security to the amount of £200.

The following is an Abridgment of the Statutes under which the Excise Establishment is regulated—7 & 8 Geo. IV. c. 53; 4 & 5 Wm. IV. c. 51; and 4 & 5 Vict. c. 20.

Commissioners and other Officials.—The crown idom. The commissioners appoint the proper colis empowered to appoint commissioners, not exceeding thirteen in number, for the collection and management of the excise duties of the United the duties, not exceeding the number fixed by a general order from the Treasury. They pro-Kingdom; they are subject to the directions of the mote, suspend, and dismiss officers, and regulate their salaries, allowances, and expenses. No per-of a comptroller and suditor for the United Kingson, holding any office in connexion with the excise,

is to deal in creinable commodities, under penalty able on the proprietor by the act applicable to forfesture of his office, and honopacity of the approximation of the other in the action of the particular manufacture; and any officer connected with the excise Any officer connected with the excise has a forth of the connected with the excise has a forth of the connected with the connected with the connected manufacture; and any officer manufacture; and the property of a growing his duty, is liable to a penalty of £00, and to be readered heapsable of serving in any government office. The same pecuniary penalty is included the property of the connected with the property of the connected with the control of the collection of the other is indemnified. Where officers would have in penalties or forfeitures, if they are found to have acted collawity, as above, and the officer of the survey, to be entered in the general entry-book; the penalty for omission is \$700. A person employing entered premises or utends, does so by gridg an account, according to the propose than those for which they are for the connected with the conflict of the survey, to be entered in the general entry-book; the penalty for omission is \$700. A person employing entered premises or utends, does not be premised to the propose that have the premise of the conflict of the survey of the penalty for omission is \$700. A person employing entered premises or utends, does not be premised to the conflict of the survey of the penalty for omission is \$700. A person employing entered premises or utends, does not premise, in the officer of the survey to be entered in the general entry, the commissioners may consider the premise of the conflict of the survey to the penalty and the premises of the premise of the conflict of the penalty and the premise is responsible. It is the premise in the premise of the premise is the premise of the premise

can proceed for any penalty, forfeiture, or condemnation, except by order of the commissioners, or at the instance of the law officers of the
crown, summary proceedings for conviction
upon immediate arrest excepted. Actions for
penalties and condemnations proceed before
three or more commissioners within the circle
of the chief office, or one or more justices of
peace in the country. Information must be presented within four months after the offence or
seizure, notice being given to the accused within
one week after the exhibiting of the information.
The party receives ten days' warning to attend,
by summons, except in the case of prosecution
for double the value of duties neglected to be
paid, when twelve hours' warning is sufficient.
The justices of peace, to the number of two or
more, are appointed to meet every three months,
or oftener if there be occasion, to hear excise
prosecutions. No officer of excise can act as a
justice; nor can any person carrying on a business subject to excise regulations act in any case
relating to that class of business. Convictions contrary to either of these regulations act in any case
relating to that class of business. Convictions contrary to either of these regulations act in any case
relating to that class of business. Convictions contrary to either of these regulations act in any case
relating to that class of business. Convictions contrary to either of these regulations act in any case
relating to that class of business. Convictions contrary to either of these regulations act in any case
relating to that class of process of the concase and informers are competent witnesses,
notwithstanding their right to receive a portion
of the penalty or forfeiture, on conviction. In
all prosecutions, whether at the instance of the
excise, or against any officer of excise, the proof
that goods have paid duty, or that they are not
of a kind for which duty is exigible, lies on the
proprietor or person claiming them. The justices
may mitigate penalties down to one four excise, or against any officer of excise, the proof that goods have paid duty, or that they are not of a kind for which duty is exigible, lies on the of action, may tender amends within a month, proprietor or person claiming them. The justices in may mitigate penalties down to one fourth part bar of action, and on being deemed sufficient, the at their discretion; but this does not extend to prosecutions for double the value of duties neglected to be paid. It is to be observed that the costs as above. In the case of a seizure, where ejected to be paid. It is to be observed that the costs as above. In the case of a seizure, where decision is given for the claimant, the person who separate statutes applicable to the different excisable commodities, impose their respective the judge report that there was a probable cause penalties; and where, by any such act, a penalty is imposed, and, in default of immediate pay officer for any such seizure; if the judge give a similar report, the prosecutor becomes entitled justices cannot mitigate except where they are to only 2d of damages, and to no costs.

condemned, the owner having the choice of receiving the proceeds, or the appraised value, if act. The commissioners of excise may mitigate the final decision is in his favour, and a farther or sum of compensation for the loss sustained by the seizure, at the discretion of the commissioners.

Procecutions.—No actions of any description can proceed for any penalty, frediture, or commissioners any ludgment is for the condemnation, except by order of the commissioners, rat the instance of the law officers of the coverage of the commissioners, and the crown, summary proceedings for conviction upon immediate arrest excepted. Actions for the chief office, or one or more justices of the crown may stop prosecutions, and the condemnation of the chief office, or one or more justices of peace in the country. Information must be presented within four months after the offices or converted to do so by the terms of the centing the first penalties. An appeal lies from entirely remit penalties. An appeal lies from attended to entirely remit penalties. An appeal lies from entirely remit penalties. An appeal lies from attended to entirely remit penalties. An appeal lies from entirely remit penalties. An appeal lies from attended to entirely remit penalties. An appeal lies from attended to entirely remit penalties. An appeal lies from attended to entirely remit penalties. An appeal lies from attended to the condemnation, where it is for a penalty, it can be levied on the goods of the party stop and the formation of property, it is for a penalty, it of sale; and where it is for a penalty, it of sale; and where it is for a penalty, it of sale; and where it is for a penalty, it of sale; and where it is for a penalty, it of sale; and where it is for a penalty, it of sale; and where it is for a penalty, it of sale; and where it is for a penalty, it of sale; and where it is for a penalty, it of sale; and where it is for a penalty, it of sale; and where it is for a penalty is allowed to sale; and where it is for a penalty is allowed to sa or after judgment. The commissioners may allow a sum not exceeding eightpence per day to excise prisoners. All questions as to arrears of duty, penalties, forfeitures, seizures, &c. belong exclusively to the jurisdiction of the Court of Exchequer, with the exception of the questions which, as above, are decided by commissioners or justices. All prosecutions in the Court of Exchequer must be commenced within three years after the cause of action. In cases which the justices are empowered to decide, no defendant can bring the proceedings before any superior

EXT

Justices are empowered to decide, no defendant can bring the proceedings before any superior court, but the crown may bring any process into the Court of Exchequer by certiorari.

Actions against Officers, &c.—When an action is to be brought against any officer or other person acting under the excise laws, a month's notice in writing must be given, and it must be pursued within three months after the time when the cause of action arose. If the pursuer is unsuccessful, treble costs are awarded against him. Any officer or other person who receives notice

EXPECTATION OF LIFE, a phrase improperly applied by writers on Life Insurance to the average of forthcoming years in the life of an individual. As explained in the article Interest and Annutries, it is different from the term of probable life.

EXPORTATION. [CUSTOMS REGULATIONS.] S
EXTENT, WRIT OF, is a process employed at the instance of the crown for attaching the body, goods, or lands of a debtor. Extent is either in chief or in attaching the body, goods, or lands of a debtor. Extent is either in chief or in aid. The former issues against the crown's debtor, the latter against the debtor of the crown's debtor. It is a rule that an extent can only be founded on matter of record, and so if it be required on a simple contract, and without bond, a commission is issued out of the Court of Exchequer, on affidavit of the debt, to two commissioners who are authorized to inquire, with the assistance of a jury, whether the defendant be indebted to the crown in any and what sum, and to return the result of the inquiry to the court. No notice is given to the defendant of the inquiry. Where the debt is on bond, the writ may issue on the showing of the bond, accompanied by an affidavit. The affidavit on which an extent in chief is obtained, termed the affidavit of danger, must state the debt, the manner in which it arcse, and the circumstances connected with the debtor's situation, owing to which it is in danger of being lost. The fist, which is the warrant for issuing the extent, may be obtained at any time from the Chancellor or a Baron of the Exchequer. The writ is tested by the Chief Baron (in Scotland by the judge of the Court of Session who acts as the judge of Exchequer), signed by a Baron of the Exchequer. The writ is tested by the Chief Baron (in Scotland by the judge of the Court of Session who acts as the judge of Exchequer), signed by the Queen's Remembrancer, and sealed with the Exchequer seal. This is termed

the tests, and the goods affected are bound from its date. The writ in England directs the Sheriff to enter on the defendant's property, take his person, and inquire by jury what lands and tenements, and of what yearly values, he had at the time when he became debtor to the crown, or at any time since (or if it be on a simple contract debt, what he now hath), and what goods or chattels, debts, credits, or other assets, he, or any person in trust for him or to his use has, and to appraise, extend, and seize all such property. It is a peculiarity in Scotland (the Exchequer law of which is in other respects derived from that of England), that real property cannot be affected by a writ of extent. In England, a jury is impannelled to inquire into the funds, and all having an interest may appear. The effect of the writ on third parties is, that the property of the debtor is bound by it from the date of the teste, into whatever hands, or for whatever consideration it may pass. All the debtor's property may be taken under the extent, except what is necessary for himself and his family, and excluding beasts of the plough if there be other chattels sufficient. Goods bons fide sold, or assigned for the benefit of creditors before the teste (though the latter turn out to be an act of bankruptcy), cannot be affected, nor can goods pawned, or on which a factor has been entitled to a lien, before that event. By the English bankrupt laws, the crown's extent is defeated by the choice of assignees, the estate immediately vesting in them. In sequestrations in Scotland, the vesting takes place from the date of the act and warrant in favour of the trustee. Where an extent in chief has been obtained, and debts found due to the crown's debtor, an extent in chief of the second degree may be issued, and against that debtor's debtor an extent in chief of the third degree, and so on. An extent in aid is issued for the benefit of a crown debtor, who is himself liable to an extent in aid is sisued for the benefit of a crown debtor, who is

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FACTOR, a commercial agent residing at a distance from his principal, and having the superintendence of some branch of his employer's trade in the place where he acts. A factor differs from an ordinary agent in this, that he does not represent his principal, but acts as a principal himself in his transactions with third parties. He is distinguished from a broker, in as far as he has the personal possession and management of the goods over which his superintendence extends. The factor carries on his commercial operations on commission. He receives consignments from his principal, and makes sales and remittances in return, balancing accounts from time to time. He may act without disclosing the name of his principal. He frequently holds a Del Credere commission [Del Credere]. Like other mandatories, the factor is personally responsible for whatever he may do exceeding the powers delegated to him, and where they are not expressed in the terms of his commission, his powers will be limited by the custom of the trade. He is not responsible "at all events" (as it is termed) for the safety of goods within his charge, that is to say, he is not liable for them as if he had insured them against all risks; but he ought to bestow on them the same care as on his own property, and it would appear that he will be amenable to his employer if he do not. He is not in the general case responsible for the consequences of fire, robbery, or other accident, but there are precautions which, in certain circumstances, he must adopt. One of the most important is that of protecting his principal's interest by insurance, and if he have effects in hand, he is in all cases bound to comply with directions to insure, being, on failure, himself considered responsible. Where goods are consigned to a factor, his title to them, and right to dispose of them, is generally conveyed in an indorsed bill of lading, but in questions with parties privy to the transaction, it is held that a letter of advice is sufficient. Where the factor has absolute power

claims, or of such circumstances as render the bill of lading not fairly and honestly elaims, or of such circumstances as render the bill of lading not fairly and honestly assignable. But, inasmuch as the character of a factor is consistent with the power to sell, the knowledge of this circumstance would not probably be considered as any impeachment of the transaction if it would be otherwise valid " (Paley, 239, 240). A factor has a lien on the goods consigned to him, not only for charges affecting those goods, but for his general balance. The lien extends to every portion of the goods, and when they are disposed of, to the proceeds. On parting with possession, the factor abandons the lien, and goods transmitted to him with a specific appropriation are excepted from it. (Paley on Principal and Agent.)

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ABRIDGMENT OF THE FACTOR'S ACT, (6th Geo. IV. c. 94.)

ARRIDGMENT OF THE FACTOR'S ACE, (6th Geo. IV. c. 94.)

§ 1. Any person intrusted with goods for the purpose of consignment or sale, who ships them in his own name, and any person in whose name in the proof of any money or negotiable security advanced for the use of the person in whose name "such goods, wares, or merchandise shall be shipped, or in respect of any money or negotiable security, or courties received by him, to the use of the person in whose name and to all intents and purposes as if such person were the true owner of such goods: "Provided that at or before the advance the consignes shall not have notice by the bill of lading that the person in whose name goods are shipped is not the person in whose name goods are shipped has been intrusted with them for the purpose of consignment or sale, the burden of proving the presumption.

§ 2. Any person in possession of a bill of lading, India warrant, dock warrant, warehouse heeper's certificate, wharfinger's certificate, or other delivery warrant, is held the true owner of the goods it represents, so far as to render valid any contract for the sale, deposit, or pledge to them, the contract being binding in the owner, though the purchaser is aware that has contracted with and or other consignes is aware that he has contracted with and or other consignes is aware that he has contracted with and or other consignes. "Provided that and ordinary course of business," and the party have not notice on entering on the contract, or making payment, that the payment of such goods, in pledge, though the presuments or agents, but no better right can be acquired in such factors or agents, but no better of such deposit or pledge to predge, though the presumption.

§ 2. Any person in possession of a bill of lading, India warrant, dock warrant, warehouse, the presumption is factor, but in the money from the administrator of the goods it represents, so far as to render valid any contract, or pledge to predge, though the presumption that the money from the administrator of suc

sthe true owner.

§ 3. But if the deposit or pledge be taken as a security for a prior debt owing by the person in possession, then the individual taking the goods for no greater sum than is covered by the factor's acquires no farther title than could be communitien in not considered franct; the acceptance of nicated by the one so parting with the possession of them.

§ 4. Persons are safe in contracting with a pledge in these circumstances unless the bill be agents for the purchase of goods intrusted or paid when it becomes due.

FACTORAGE, the allowance or per centage given to factors by the merchants or manufacturers who employ them; it is fixed by mutual agreement or the usage of

trade. [COMMISSION.]
FACTOR, INTERIM, in the law of bankruptcy in Scotland, is the person who has charge of the bankrupt estate till a trustee be chosen. He is elected by a majority of qualified creditors, at a meeting held on a day specified in the writ awarding the sequestration, not less than eight or more than fourteen days from the date thereof. The sheriff decides as to the election in case of dispute. Where an interim factor is not duly elected, his duties devolve on the sheriff-clerk. At the meeting to elect a trustee, he presents his accounts and vouchers, and remuneration may be awarded. If he be dissatisfied with the sum, he may appeal to the sheriff. [SEQUESTRATION.]

FACTORY, an establishment of traders in a foreign land, who are governed by regulations adapted for their mutual protection, against the interference of the governments of the countries in which they reside. Such establishments were common in former times, but they have almost ceased to exist, in consequence of the greater protection now afforded to merchants in foreign parts.

FACTORY SYSTEM. The term factory is now very commonly applied to an establishment in which a number of persons are employed, for the production of some article of manufacture, generally with the sid of mechinary.

duction of some article of manufacture, generally with the aid of machinery. The factory system of Great Britain owes its origin to those mechanical inventions which have led to the development of the cotton manufacture; and it is in the mills in which that manufacture is carried on that the system has been brought to its highest state of perfection. The last general return respecting the number of factories, and the people employed in them, was made in the year 1835, when the number of factories in the United Kingdom was 3236, of which there were employed in the manufacture of cotton, 1304; wool, 1322; silk, 263; flax, 347. The number and ages of the persons working in these factories were as follows:—Between 8 and 12 years, males, 10,087; females, 10,501; total, 20,588: Between 12 and 13 years, males, 17,687; females, 18,180; total, 35,867; Between 13 and 18 years, males, 43,482; females, 64,726; total, 108,208: Above 18 years, males, 87,299; females, 103,411; total, 190,710: Total males, 155,555; total females, 196,818: In all, 355,373; of which there were employed in cotton factories 220,134; in woollen factories, 71,274; in silk factories, 30,682; and in flax factories, 33,283. The proportion of females employed in factories is shown to be much greater in Scotland than in the other parts of the United Kingdom. 8

A very large proportion of the hands employed is those establishments, it will be

in the other parts of the United Kingdom. S.

A very large proportion of the hands employed in those establishments, it will be seen, consists of children and young persons. There having been reason to believe that, in many cases, they were tasked beyond their strength, an investigation of the practices in this respect was made in 1832 by a parliamentary committee, and subsequently by a royal commission. The examinations which then took place proved that, although the abuses alleged to exist had been greatly exaggerated, around remained the media the enterty of the provident and in consequence. enough remained to render legislation expedient; and in consequence an act was passed in 1833 (3 & 4 Wm. IV. c. 103), the chief provisions of which are the fol-

lowing :-

§ 1. No person under 18 years of age shall be allowed to work between \$\(\) o'clock P.M. and \$\(\) \\
except as hereafter, in any cotton, woollen, worsted, hemp, fiax, tow, linen, or slik mill or factory, in soutching, carding, roving, spinning, making thread, dressing or weaving of cotton, wool, worsted, hemp, fiax, tow, or slik, either separately or mixed, in any such mill, in any part of the U.K. But the act not to extend to the fulling, roughing, or boiling of woollens, nor to to he labour any persons employed therein, nor to the labour any persons employed in packing in any place attached to a mill, and not used for any manufacturing process, nor to any mill used solely for the manufacture of isce.

§ 2. No person under 18 shall be employed in factories; from whose week, of children employed in f

work.

hours' work.

§ 7. No child, except in ailk mills, shall be employed who shall not be nine years old.

§ 8. No child, except in silk mills, shall be employed more than 48 hours in any one week, their proceedings to one of the Secretaries of State.

hed once a-year.

employed more than 48 hours in any one week, their proceedings to one of the Secretaries of State.

FAILURE, a common term for bankruptoy.

FAIR (from the Latin feria, a holiday), a greater kind of market, held at a stated time and place, to which people resort from different and sometimes distant places, for the purpose of traffic. Anciently, commodities of every kind were chiefly sold at fairs; but in modern times the increase of towns, and the improvement in the means of communication, have tended greatly to diminish their importance; and in this country they are now mostly confined to the sale of agricultural produce.

PRINCIPAL ENGLISH FATRS.

January.

30, 21. Melton Mowbray, horses and cattle.

February.

94. Daventry herostandary.

February.

24. Daventry, horses, cattle.

March.

1. Bristol (10 days) miscellaneous. 2. Ashby de la Zouch, horses, cows, sheep.

7. Higham Ferrars, horses, cattle.
25. Woodbridge, Suffolk, horses.
29. Durham, cattle, sheep, horses.
April.
5. Gloucester, cheese.
8. Pontefract, sheep, cattle.
8, 9, 10. Barnet, horses and Scotch cattle.

^{*} The dates of the English fairs are filled up as they occurred in the year 1840; but in other years they will sometimes be different, as they are not unfrequently regulated by saints' days, or particular days of the week. When the date falls on a Sunday, they are generally held on the day following.

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92. East Haley (every Wednesday till July) sheep.
93. Oakingham, horses, cattle.
94. Lincoln (4 days), sheep, &c.
97. 98. Boroughbridge, cattle, sheep.
99. Alton, sheep, lambs.

October.
                                                                                                                                                                                                                                                                  2. Howden, horses.

— Woodstock, cheese.

— Dudley, horses, cattle, wool, cheese.

2, 3, 4 Northampton, horses, cattle, cheese, &c.

10. Lelcester, cheese, cattle.

— Weyhill, sheep.

11. Holbeach, horses.

12. See Faith's, near Norwich, principal English
                                                                                                               Man
                             Reading, horses, cattle
Northampton, horses.
        4. Northampton, horses.
4. 8. Boston, sheep.
6. Abingdon, cattle, cheese.
8. Borndon, cattle, cheese.
8. Btroud, cattle, sheep, pigs.
10, 11. Askrig, cattle.
11. Crediton, cattle.
12. Oswatry, cattle, sheep, pigs.
— Totness, horses, sheep, cattle.
13, 14. Ripon, horses, sheep.
20. Swindon, cattle, pigs, sheep.
21. Dunstable, horses.
22. Appleshaw, sheep-show before Weyhill Fair.
— Howden, horses.

June.

    Holbeach, borses.
    St Faith's, near Norwich, principal English fair for Scotch cattle.
    Haverfordwest, cattle, horses, sheep.
    Harket-Harborough (9 days), horses, cattle.
    Devizes, sheep, hogs, &c.
    Burbar-on-Trent, horses, cattle.
    Horncastle, do.

Jame.

Jame.

Jame.

Jame.

1. Leicester, horses, cows, sheep.

5. Malmesbury, cattle, horses.

9. Ashly de la Zouch, cattle, horses, sheep.

19. Haverfordwest, cattle, horses, sheep.

19. Morthampton, horses.

19. Hornbay, cattle, horses.

20. Hornbay, cattle, horses.

21. Horncastle do.

22. Horncastle do.

23. Wigan, horses, cattle.

24. Higham Ferrars, do.

25. Spalding, do.

July

10. Barnard
                                                                                                                                                                                                                                                                  November.

1. Saffron Walden, cows.

5. Beverley, cattle, horses, sheep.

6. Newcastle-under-Line, cattle.

— Eccieshall, cattle, sheep, saddle-horses.

7. Rochdale, horses, cattle, woollens.

8. Cirencester, cattle, sheep, horses.

8. 9. Leeds, cattle, horses, hardware.

6. Warwick, horses, cows, sheep.

12. Loughborough, do.

— Farnham, horses, cattle.

17, 18. Andover, sheep, horses, leather, cheese.

90. Boston, horses.
                                                                                                                                                                                                                                                                                                                                                                  Nonem
                                                                                                                                                                                                                                                                  17, 18. Andover, sneep, norses, seamer, cneese
29. Boston, horses.
22. Hampton Green, Scotch cattle.
Guildford, horses, cattle, sheep, hogs.
28. Gloucester, cattle, pigs, horses.
— Harleston (for a month), Scotch cattle.
30. Warrington (10 days) horses, cattle, cloth.
— Wells, oxen, horses, sheep, hogs.
         July.

10. Barnard Castle, wool.

12. Thetford, wool.

21. Howden, horses.

26. Lewes, wool.
         August.
3. Daventry, horses, cattle, sheep.
7. Barnard Castle, wool.
10. Doncaster, wool.
21. Horncastle, principal English fair for horses.
— Rugby, horses, cows, sheep.
26. Ipswich, lambs, chees.
30. Spalding, horses.

**Ecotomber.**
                                                                                                                   August.
                                                                                                                                                                                                                                                                  December.

1. Bury St Edmunds, cattle.

Rotherham, cattle, horses.

4. Dursley, cattle, &c.

Atherston, horses, cows, sheep.

6. Bodmin, oxen, sheep, cloths.

Higham Ferrars, horses, cattle, sheep.

7. Cheltenham, cattle, &c.

10, 11. Bewdley, hogs, cattle, horses, cheese, &c.

11. Baldock, cheese, &c.

Boston, cattle.

9. 10, 11. Bradford (Yorkshire), hogs.
                                                                                                                                                                                                                                                                                                                                                              December.
         30. Spalding, horses.

September.

1. Bristol (10 days), miscellaneous.

4. Monmouth, wool.

4. & Barnet, sheep, Wolsh cattle, horses.

11. Salisbury, sheep.

18. Woodbury Hill, kersey, druggets, &c.

Bury (Lancashire), cattle, horses, woollens.
                                                                                                                                                                                                                                                              Boston, cattle.

9, 10, 11. Bradford (Yorkshire), hogs.

14. Thirak, cattle, horses, sheep.

17. Hornsea, horses, cattle.

28. Bridgewater, cattle, &c.
                                                                                                                                                                            PRINCIPAL SCOTTISH FAIRS.
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FRINCIPAL SCOTTISH FAIRS.

Falkirk (Tryst), 2d Monday in October for sheep, and following day for cattle and horses.

Edinburgh, Hallow Fair, 2d Monday in November, cattle and horses.

Doune, November, lat Tuesday, sheep; lat Wednesday, cattle and horses.

Ruthergien, 1st Friday after 4th May, great horse market.

Beauly, or Muir of Ord, Ross-shire, monthly, except January, February, March, and December.

Dumbarton, spring and summer months, for West Highland cattle and sheep.

Lockerby, Dumfriesshire, August, lambs; September, cattle and sheep. PRINCIPAL IRISH FAIR.

Ballinasioe, in Galway, October 5 (four days), cattle and sheep.

The foreign fairs are described under the heads of the countries wherein they are held.

The foreign fairs are described under the heads of the countries wherein they are held.

"In the feudal ages, the right of holding fairs was a valuable privilege, conceded by the sovereign to the lord of the manor; and from the arts which the old barons used to draw crowds to their markets, perhaps Warren and Rowland might learn new ways of alluring purchasers to their markets of blacking and bear's grease. Much skill was shown in choosing the site; the author of a Statistical View of the Fairs of France remarks, that, on examining his work, it will appear that they were placed, for the most part, on the frontiers of the kingdom, or on the marches of ancient provinces; or at the foot of high mountains, at the beginning or end of the snow ascon, which for months shuts up the inhabitants in their valleys; or in the neighbourhood of famous cathedrals or churches frequented by flocks of pligrims; or in the middle of rich pastures. The devotion of the people was also turned to good account; many fairs were held on Sundays in churchyards; and almost in every parish a market was instituted on the day on which the parishioners were called together to do honour to their patron saint. Lest all these artifices should fall to secure a great concourse, promises of sport and fun were held out, and each fair had its own peculiar drollery."—
(Deliciae Literariae, p. 66.)

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FALKLAND ISLANDS, or Malvinas, an insular group in the Southern Ocean, about 300 miles N.E. of Cape Horn, between lat. 51° and 52° 45′ S. and long. 57° 20′ and 61° 46′ W. It consists of two large islands, East and West Falkland, and about 90 islets. The two former contain nearly 13,000 square miles. These islands were discovered by Davis in 1592; and small settlements, at different times made on them by the English, French, and Spaniards, were successively abandoned. But as, since the increase of the southern whale fishery, and the opening of the South American trade, they have again attracted attention, formal possession was, in 1833, taken of them by the British government.

East Falkland, or Soledad, contains the small British settlement of Port Louis, which is situated on Berkeley Sound, at the north-east point. There is sufficient depth of water for vessels of any size in Berkeley Sound, with good shelter and anchorage. The principal production of the island is cattle.

West Falkland, the larger of the two islands, is at present uninhabited. The part chiefly frequented is Port Egmont on the northern coast.

These islands are surrounded with good harbours, and the waters abound with fish, particularly a species of mullet, which is salted for the use of the shipping. There are also numerous seals and sec-lephants. The skins of the former are very valuable, and the procuring of them forms the chief inducement for ressels to resort to the islands.

FANEGAA a Spanish corn measure equivalent to 1½ Imp. bushel.

FANEGADA, a Spanish corn measure equivalent to 111 Imp. bushel.
FANEGADA, a Spanish measure for corn land, equivalent to about 1 Imp. acre 10g poles.

FATHOM, a measure of length in many countries, equal 6 feet. It is said to have been derived from the height of a well-proportioned man.

FAUX, a Swiss land-measure, equivalent to 7855 English sq. yards, or 65%

French ares; 6f faux = 10 Imp. acres.

FEATHERS for ornamental dress are obtained from the estrich and a variety of other birds, the chief of which are described under their proper heads.

Bed-feathers are procured in many parts of Britain from common poultry, and large quantities are annually brought from Limerick and other ports of Ireland. Considerable imports both of feathers and down likewise take place from the countries adjoining the Baltic and other parts. The most esteemed for beds are those of the groups and those are those of the groups and those are those of the groups and those are

those of the goose, and they are best when plucked from the living animal, which is done thrice a-year, in the spring, at midsummer, and the beginning of harvest.

FEE-SIMPLE, a term sometimes applied to the value of a perpetual annuity; and more frequently to an English tenure of land, in which seizure is granted to

a party and his heirs for ever.

FERNANDO PO, a mountainous island lying in the Bight of Biafra, 20 miles from the African coast. It is about 120 miles in circumference, and is fertile and from the African coast. It is about 120 miles in circumference, and is fertile and beautiful. It was occupied by Great Britain as a naval and military station in 1827, from its supposed salubrity, and the facilities afforded by its situation for the suppression of the slave trade; but the climate having been found to be as pestiferous as that of the other settlements on the adjoining part of the African shore, the troops were withdrawn in 1834. The principal settlement was Clarence Town, on the N. side, in lat. 3° 53′ N., and long. 7° 40′ E.

FERRET, a cotton ware resembling tape, but much stouter, chiefly used in binding or making up articles of dress. It is also made of silk; and this last is sometimes called Italian ferret.

sometimes called Italian ferret.

FIAT, in the English law of bankruptcy, is the act of court by which the petitioning creditor is authorized to prosecute his complaint against the bankrupt. By 1 & 2 Wm. IV. c. 56, § 12, it was substituted for the commission of bankruptcy, formerly in use. It is issued by the Lord Chancellor, the Master of the Rolls, the Vice Chancellor, or a Master in Chancery specially authorized by the Chancellor. [Bankruptcy.]

FIGS (Arab. Teen. Fr. Figues. Ger. Feigen. 1t. Ficht. Por. Figos. Sp. Higos), the fruit of a small tree (Ficus Carica), indigenous to the temperate parts of Asia, and now cultivated in the fertile islands of the Mediterranean, in Spain, Italy, Greece, and France. It is also grown with some success in the southern parts of England, but seldom in Scotland, except under glass. The fig consists of a pulp containing a number of seed-like pericarps enclosed in a rind; and is of a dark purple or brownish colour, with a sweet taste. When ripe they are generally dried in ovens to preserve them, and then packed very closely in the small chests and baskets in which we import them. The tree produces a double, and in some climates, as in Syria and Barbary, a triple crop; whence the great value attached climates, as in Syria and Barbary, a triple crop; whence the great value attached to it in Eastern countries, where it bears fruit through a considerable portion of the year. The first ripe figs come to maturity about the end of June; the second crop or summer fig is that which is dried; the third often hangs and ripens upon the tree after the leaves are shed.

In the Levant, the time of gathering the summer fig, with its attendant process of drying and packing for the European market, is one of great bustle and activity. The chief seat of this trade is Smyrna. Dried figs also form a considerable axticle of commerce in Spain, Italy, and the south of France; besides affording, as in the East, an important article of food to the native population. Of late years, owing partly to a reduction of duty, the consumption of figs has increased in this country, amounting now to nearly 30,000 cwts. a-year; the greater part of which is imported from Turkey in little chests, or drums, of about 24 lbs. each. Figs are also brought from Malaga and Valencia in Spain, and Faro in Portugal. These last are mostly in packages called fresits. The Faro frail = 32 lbs.; the Malaga frail = 56 lbs.

"The want of blossom on the fig-tree was considered as one of the most grievous calamities by the Jews. Cakes of figs were included in the presents of provisions by which the widow of Nabal appeased the wrath of David. In Greece, when Lycurgus decreed that the Spartan men should die in a common hall, flour, wine, cheese, and figs were the general contributions of each individual to the general social to the Athenians considered figs an article of such necessity that their expertation from Attica was prohibited. Either the temptation to evade this law must have been great, or it must have been disliked; for the name which distinguished those who informed against the violators of the law became a name of reproach, from which we obtain our word eyoophant. At Rome the fig was carried next to the vine in the processions in honour of Bacchus, as the patron of plenty and joy; and Bacchus was supposed to have derived his corpulency and vigour, not from the vine, but from the fig. All these circumstances indicate that the fig contribute wery largely to the support of man; and we may reasonably account for this from the facility with which it is cultivated in climates of moderate temperature."—"It is probable that the fig contributed here in favourable situations, such as our southern coast. But it would seem from our old writers, and indeed from a common expression even of the present day, that, from some association of bleas, the fig was an object of contempt. "Fige for thy friendship," says Pistol." [Lib. of Ent. Recorded; art. Fig. Sub. v. 1. p. 342, 344.]

FILBERTS, the fruit of a variety of the hazel-nut (Corollar analysis).

FILBERTS, the fruit of a variety of the hazel-nut (Coryins aveilana), produced partly by the superiority of soil and climate where it grows, and partly by culture. The filbert is not thicker than the common nut, but is at least double the length, with a corresponding kernel. The largest of the species is the cob-nut, which is round. What is called the cluster-nut differs from the others only in the fruit

being produced in large clusters at the ends of the branches. In this country, the management of the filbert is best understood in the county of Kent, especially about Maidstone, where immense quantities are grown for the London market. FILE, Files (Du. Vylen. Fr. Limes. Ger. Feilen. It. Lime. Por. & Sp. Limas. Rus. Pili), a steel instrument with teeth upon the surface, for cutting and abrading metal, wood, and other substances. When the teeth, formed by a sharpabrading metal, wood, and other substances. When the teeth, formed by a sharp-edged chisel, extend across the surface, they are properly termed files; but when by a sharp-pointed tool, in the form of a triangular pyramid, they are called rasps: the latter are chiefly used for wood and horn. Of files there are two varieties: lst, Single cut, where the teeth are a series of sharp edges, appearing like parallel furrows; 2d, Double cut, when these are crossed by a second series of similar teeth: the first are fitted for brass and copper, the second for the harder metals, such as iron and steel. Files are also distinguished according to their degrees of fineness; the finest of all is the dead smooth; the next to this is the smooth; then the second cut; the bastard cut; the rough; and the rubber, a heavy square file used for the coarser kinds of smith-work. They are also distinguished by their shape, as flat, half-round, three-square, four-square, and round. The coarser kinds are made from the inferior marks of blistered steel. Those formed of the Russian iron called old sable (known by its mark CCND) are excellent. The finest Lancashire files, for watchmakers, are made of the best Swedish iron, called hoop L or Dannemors. watchmakers, are made of the best Swedish iron, called hoop L or Dannemora. Many contrivances have been set on foot to perform the operation of file-cutting by machinery, but none of them have fully succeeded, and all the best continue to be cut by the hand. The manufacture is one of the staples of Sheffield, and the finer kinds are extensively made at Warrington and Prescott, in Lancashirc. Files, besides being used in immense quantities at home, are largely exported.

Files, besides being used in immense quantities at nome, are largely experied.

FIR. [Pine.]

FIRE-ARMS. [Gun.]

FIRE-WORKS (Fr. Feux d'artifice. Ger. Feuerwerke), well-known devices composed of explosive combustibles, generally of gunpowder along with iron, steel, copper, and zinc filings, resin, camphor, lycopodium, and lampblack. They are divided into three classes: 1st, Those to be set off upon the ground; 2d, Those which are shot up into the air; 3d, Those which act upon or under the water.

FIRKIN, an English measure of capacity now disused.

FIRLOT, an old Scottish corn-measure equivalent to one-fourth of the Boll. FIRM, the title under which the business of a mercantile company is carried on.
FISH, FISHERIES. The term fishery is applied to those places where fish
are caught in such abundance as to constitute an important article in commerce. are caught in such abundance as to constitute an important article in commerce. Great Britain possesses a coast-line of above 3000 miles in extent, while that of Ireland is above 1000 miles; and the greater part of the shores of both islands abound with those species of fish which exist in the largest number, and yield a supply of food the most acceptable. A very considerable portion of our coast population are more or less engaged in fisheries; and the shores are indented with bays and harbours which facilitate their employment, and render it an important branch of national industry. The principal kinds of fish which are the object of systematic occupation in the British seas are the herring, cod, ling, hake, lobster, mackerel, oyster, pilchard, and salmon; but the quantity of other fish taken is in the aggregate exceedingly great; and the capture of whales in the Polar Seas is an employment in which a considerable though declining amount of British shipping is engaged, principally belonging to the north-eastern ports. The whole of these are described under their proper heads. The annual produce of the fisheries of the United Kingdom is variously estimated at from £4,000,000 to £8,000,000.

Under the present tariff the import of fish of every description, fresh or cured, is free. The northern whale fishery having failed resort has been had lately to the high latitudes of the Southern Pacific cosean. But the principal fishery is on the Great Bank of Newfoundland, which in 1848 yielded 1,000,000 quintals (a quintal = 100 lbs) of cod fish.

FISH-HOOKS (Fr. Hameçons. Ger. Fishangem), well-known instruments made of the best, smooth, sound, steel-wire; those for salt-water fishing being frequently tinned to prevent them wearing rapidly away in rust. In the United Kingdom they are manufactured chiefly at Redditch, in Worcestershire. Fish-hooks, besides being extensively used in this country, are largely exported.

FISH-MAWS, a term applied in Oriental commerce to the sounds of fish which is largely exported from the eastern islands to China. It is a favourite article of luxury with the inhabitants of that country, often bringing \$75 per pecul in the market of Canton.

In the market of Canton.

FITCH, the fur of the pole-cat, is principally brought from Germany; it is soft and warm, but its offensive odour tends to depress its value.

FLAG, the ensign borne on the mast of a ship to designate the country to which it belongs: in the royal navy it is likewise made to denote the rank of the officer by whom the ship is commanded. The ensign to be worn on all British merchant vessels is ordained by proclamation, dated 1st January 1801, to be a red flag, having in the upper and inner corner, next the staff, the crosses of St George, St Andrew, and St Patrick, blended on a blue ground.

None of her Majesty's subjects are permitted to hoist in their vessels the union jack, or any pendants or colours usually worn in her Majesty's ships, and prohibited to be worn by proclamation of lat January 1801, under a penalty not exceeding £500; and any officer of her Majesty's navy, or customs, or excise, may enter on board, and seize and take away such colours, which shall thereupon become forfeited. (4 Wm. IV. c. 13, § 11.)

FLANNEL (Fr. Flannelle. Ger. Flanell), a well-known, slight, loose, woollen stuff. In this country the finest kinds are made in Wales, principally in Montgomeryshire, and within a circle of about 20 miles round Welchpool. Flannels are

gomeryshire, and within a circle of about 20 miles round Welchpool. Flannels are also manufactured at Bury, in Lancashire; in Shropshire; and to a small extent in Wicklow, in Ireland. [Woollen Manufacture].

FLAX (Du. Vlasch. Fr. Lin. Ger. Flachs. It. Lino. Por. Linho. Rus. Len. Lon. Sp. Lino), an annual plant (Linum usitatiesimum), cultivated in this and other countries from time immemorial for its textile fibres, which are spun into thread, and woven into linen cloth. The stem is upright and slender, having leaves placed alternately on it of a grayish colour. When about 22 or 3 feet in height, it divides itself into slender stalks, which are terminated by small blue indented flowers; and these produce large globular seed-vessels, divided within into ten cells, containing the bright slippery elongated seeds, well known in trade under the name of Lineekd. The plant will grow on almost any land; but though easy of culture, its quality depends very much on fitness of soil and situation. Rich alluvial land (as in Zealand, which produces the best Dutch flax) is deemed the most favourable situation for it. It impoverishes the soil, whence it is often sown on rank ground, and seldom two years successively on the same spot. The plant blossoms in June or July, and ripens its seeds in August or September. Two varieties are generally distinguished, spring flax, with short knotty stems, and close flax, with longer and smoother stems: the former is called by the Germans, who

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bestow much attention upon the culture of flax, Klanglein or Springlein, and the latter Dreschlein, the kind most commonly grown. The spring sort is sown in April or May, the late in June. When the flax is ripe, which is indicated by the bottom of the stalk becoming yellow, and the leaves beginning to drop off, it must be immediately pulled. The seed, however, is still immature, fit only for the oil-press, but not for sowing; and hence if seed be the object, the plant must be suffered to acquire its full maturity, in which case the fibres are less soft and fine. The produce varies according to soil, season, and management, from 280 to 980 lbs. per acre, but the average crop may be estimated at 560 to 700 lbs. of clear fibres, available for spinning and weaving. The average quantity of seed produced from an acre is from 6 to 8 bushels.

Good flax should have a yellowish, or bright silver-grav colour, inclining neither

Good flax should have a yellowish, or bright silver-gray colour, inclining neither to green nor black; it should also be long, soft, fine, and glistening, somewhat like silk, and without broad tape-like portions from undissevered filaments. Tow differs

sill, and without broad tape-like portions from undissevered filaments. Tow differs from flax in having shorter fibres, of very unequal length, and more or less entangled. In this country, flax is at present partially cultivated in Lincolnshire, Somersetahire, and Yorkshire; in some parts of Scotland; and in Ireland, which indeed produces a very large portion of what is required for its extensive linen manufactures. But the United Kingdom, generally, has always been in a great measure supplied by foreign countries. In 1820, the quantity of foreign flax entered for home use was 376,170 cwts.; which, in consequence of the late expansion of the linen manufacture, was increased in 1830 to 955,122 cwts.; and in 1840 to 1,261,292 cwts. Upwards of two-thirds of the whole imports are from Russia; the remainder, with the expention of a small quantity brought from France, is supplied by cwts. Upwards of two-thirds of the whole imports are from Russia; the remainder, with the exception of a small quantity brought from France, is supplied by Prussia, Holland, and Belgium.

Prussia, Holland, and Belgium.

The Russian flax is classed according to its quality, and made up into bundles by brackers, or sworn inspectors appointed by government. That imported into this country is chiefly shipped from Petersburg and Riga.

At Petersburg, the different kinds are distinguished by the names of the districts in which they are produced,—as Novgorod, Pleskau, Carelia, and Vesnikovsky flax. The quality and colour of the two first are very variable, from white to dark gray, also blueish, yellowish, and whiteish; such as is not steeped in water, and called Slanets, is of a much finer and solver harle than the common run. The Carelia is generally whiter, and of a longer and stronger harle than any other. The Vesnikovsky is of a fine sliky harle, very strong, and of a grayish or sliver tinge. At the public braack, each kind is separated into three classes or sorts, distinguished by the form in which it is made up for shipment: First, that which is put up into bobbins of 12 heads, each bobbin weighing about 2 poods, or 136 lbs. avoird-upois: Second, Bobbins of 9 heads, each bobbin weighing about 2 poods, or 72 lbs. avoird-: Third, Bobbins of 6 heads, each bobbin weighing about 2 poods, or 72 lbs. avoird-: Third, Bobbins of 6 heads, each bobbin weighing about 2 poods, or 730 lbs. avoird-gois.

"Unless the supply in view be very large, and prices disproportionately high, it is perhaps advisable, in the Petersburg market, to make purchases before August, for in and after that month prices are very frequently found to take sudden stark, from the competition of numerous buyers, who sometimes happen to have to provide for ships waiting for cargoes; besides this, the consideration of the exchange usually advancing towards autumn has not to be lost sight of." (Cark's Russia Trader's Assistant.)

At Rigs, the public braack distinguishes the various kinds of Marienburg, marked M C; Drujaner cut, marked D C; and Hoffs three-band, marked H T. 3d, 8orts, Rise in three-bands, marked R T; and Livonian flax, as fol

the best quality.

The chief ports in this country for the importation of foreign flax, are Dundee, Hull, and London. The following, extracted from the Dundee price-current of May 1841, shows the comparative estimation in which the different kinds are held in our principal market:—

Lala	L.		h a h a
Arch. Otbor53 0@54 0 Do. Crown50 051 0	Riga PTR 43	0 @ 43 10	Crown Oberland 39 0@
Do. Crown 50 0 51 0	Do. DC39	0 39 10	Arch. 1 Codilla32 10
Do. 4th sort39 10 40 0	Do. RT34	035 0	Do. 2 do. None.
Peters. 12 head44 0 44 10			Do. 3 do 26
Do. 9 do38 039 0	Memel 4 brand 38	039	Do. 1 Tow35 10
Do. 6 do34 036 0	Neust. No. 132	0 0	Do. 2 do31 031 10
Narva 12 do41 0 44 0	Do. No. 229	030 0	St. Pet. Codilla 20 0 20 10
Do. 9 do36 0 0	Konigsberg do30	0 32	Riga do23 0
Do. 6 do31 10	Crown Podolia 40	0	Narva do20 10 21 0
Liebau 4 brand. 40 0 0	Crown Druana 40	0 0	Pernau do 20 10 26 10

The duty charged up to 1895, upon foreign flax, was, when dressed, £10, 14a, 6d., and when undressed, 5d. per cwt. In that year, the duty on both kinds was fixed at 4d. per cwt.; a rate which was further reduced in 1836 to 3d., in 1827 to 2d., in 1828 to the nominal rate of 1d. per cwt., and it is now free, rough or dressed. Tares, &c. at Dundee.

Petersburg flax, generally in bobbins, but when matted, tare 2 lbs. per mat.

Riga, Pernau, and Narva flax, always in mats; tare 12 lbs. per mat.

Archangel flax, always in mats; tare 14 lbs. per

mat.
Leibau, Memel, and Neustadt flax, always in
bobbins, and therefore no tare.
Tow and codilla of all kinds, tare 14 lbs. per mat,
when matted, and no tare when loose.
Draft not allowed in Dundee.

Credit, 6 months, unless otherwise agreed.

At Hull, the commercial allowances are generally the same as in London.

Taret, &c. at London.

Petersburg flax; draft of 2 lbs. on every scale—
about 5 cwts. each when in mats. Can either about 5 cwts. each when in mats. Can either have them stripped or take the real weight of mats. Tare 23 lbs. per bobbin.

Narva flax, same as 84 Petersburg.
Riga flax, always in mats; draft on each mat 1 lb.: Tare, 30 lbs. per mat or mats 3 cwts. or upwards; 14 lbs. when under 3 cwts.; 10 lbs.

upwards; 14 lbs. when under 3 cwts.; 10 lbs. on small.
Archangel and Pernau flax; draft and tare same as Rigs.
Credit, 9 months. Thus, if by agreement, 6 months' bill is granted, then a discount of 3 months is taken off; again, if a months' lill is granted, a discount of 5 months is taken off.

NEW ZEALAND FLAX is the product of a different plant (Phormium tenax), the leaves of which yield a very strong and beautiful fibre: it has been of late imported in considerable quantities from that island for the manufacture of cordage. From having the defect, however, of breaking easily when made into a knot, it has proved much less useful than it was expected to be. Its cultivation has been attempted on the continent of Australia, but as yet with little success; also near Cherbourg, Toulon, and other places in France; and it has been introduced into Ireland, the moist climate of which is considered to be favourable to its

FLAX-SEED. [LINSRED.]

FLINT (Fr. Pierre à fusil. Ger. Fouerstein), a mineral composed almost entirely of silica. Few parts of the world are without it. It is used, when calcined and ground, in pottery · also for gun-flints, for which purpose the yellowish gray

and ground, in pottery · also for gun-flints, for which purpose the yellowish gray flints are preferred.

FLORENTINE, a silk stuff, chiefly used for men's waistcoats; it is made striped, figured, and plain,—the last being a twilled fabric. Two other stuffs are known under this name; one composed of worsted, used for common waistcoats, women's shoes, and other articles; the other, made of cotton, resembling jean, and generally striped, is used for making trousers.

FLORIN (Ger. Gulden), a name given to different silver coins, current in various parts of the Continent, especially Germany and Holland. The imperial or convention florin, the integer of account, and principal coin in the Austrian empire, is worth about 2s. 0\frac{1}{2}d. sterling; the Dutch florin or guilder is equal 1s. 8d. sterling; which is also very nearly (1s. 7\frac{1}{7}d.) the value of the Rhenish florin (in 24\frac{1}{2}\text{ guidenfuss}), lately adopted as the integer of account by the States of Southern and Western Germany; the Polish florin is equal 6d. nearly. The florin is also a German ern Germany; the Polish florin is equal 6d. nearly. The florin is also a German gold coin, worth about 6s. 11d., which is chiefly current in the countries bordering

gold coin, worth about 6s. 11d., which is chiefly current in the countries bordering the Rhine. S
FLOSS-SILK (Fr. Filoselle, Bourre de soie), the name given to the portions of ravelled silk broken off in the filature of the cocoons. It is carded like cotton or

revolled silk broken off in the filature of the coccons. It is carded like cotton or wool, and spun into a coarse soft yarn or thread for making shawls, socks, bands, and other articles, where an inferior kind of silk may be used.

FLOTSAM, JETSAM, and LIGAN, are barbarous appellations used to distinguish goods in circumstances at sea distinct from legal wreck, in order to constitute which they must be thrown on shore. Flotsam is such portion of a ship and cargo as continues floating; jetsam is when goods cast into the sea there sink and remain; ligan is where, though sunk, they are tied to a buoy, in order that they may be found again. All three belong to the crown, or its grantee, if no owner appear to claim within a year after they are taken possession of by the persons otherwise entitled to them.

FLOUNDER, one of the most common of the flat fish (Platessa flesus), is found all round our coast, particularly near the mouths of large rivers, which it generally ascends. It spawns in February or March.

The common dab, a species of flounder (Platessa fimanda) frequently caught along with that fish and plaice, is considered superior to both. It spawns in May or June, and is in best condition for the table in February, March, and April. FLOUR (Du. Bloem. Fr. Fleur de farine. Ger. Feines mehl, Semmeimehl. It. Flore. Por. Flor da farinha. Sp. Flor), the finely ground meal of wheat. Three qualities are distinguished, called firsts, seconds, and thirds. [CORN.]

The barrel of flour is 196 lbs. net.

FLOWERS (Artficial), imitations of flowers and leaves, which form a common state in the descent of the common for the particular that and provent of the common state in the descent of the common state in the desc

FLOWERS (ARTIFICIAL), imitations of flowers and leaves, which form a common article in the dress of ladies. They are extensively made in this country, but the

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best are imported from France, where great improvements have been made of late years in the manufacture. The French adopt the finest cambric for making petals, and the taffeta of Florence for the leaves; while, by some artists, whale-bone, in very thin leaves, is, after being bleached and dyed, employed for flowers. The imitations of nature made of these last are of remarkable beauty. FLUOR SPAR, or native flooride of calcium, sometimes called Derbyshire spar, is a mineral found in great beauty and abundance in that county and other places. It is procured in cubic crystals of various colours, and in the Odin mine in detached masses, from an inch to mere than a foot in thickness. This variety admits of being turned in the lathe into vases and other ornaments. Fluor spar is also sometimes used as a flux for promoting the fusion of other minerals.

FOOT, a measure of length, varying in different countries from about 11 to 13 inches.

inches

FORESTALLING, which seems to have originally signified an interrupting on FORESTALLING, which seems to have originally signified an interrupting on the highway, came to embrace all attempts to prevent victuals or merchandise from reaching a public market, or to enhance their price when they reached it. Regrating, an offence associated with it in the same statute (5 & 6 Edw. VI. c. 14), is defined, "the buying of corn, or other dead victual, in any market, and selling tagain in the same market, or within four miles of the place" (Blackstone, iv. 158); and Engrossing, another offence of a similar description, is said to consist in "the getting into one's possession, or buying up, large quantities of corn or other dead victual, with intent to sell them again" (Ib.). The statute of Edward imposed severe penalties on these offences, according to the number of convictions; but all the enactments on the subject were repealed by 12 Geo. III. c. 71. It is still held, however, by the institutional writers, that they are offences at common law, punishable with fine and imprisonment, though how far the criminal law would now ishable with fine and imprisonment, though how far the criminal law would now be extended to such cases, where there is no fraud, is very questionable. The last case litigated was that of Waddington in 1800 (*East.* i. 164). The inutility and impolicy of these antiquated interferences with the freedom of industry are now

FORGERY may be defined as the construction of a document in such a manner as to make it pass for the writing of a person different from the one who actually prepares it, and thereby to occasion a fraud. It may be committed not only as to prepares it, and thereby to occasion a fraud. It may be committed not only as to a whole document, but as to part of one, e. g. by an alteration in the amount of a bill, whereby the person who has engaged for a certain sum is made to appear bound for a larger. It is in its effect on the rights of the parties to negotiable documents only that it is connected with the subject of this work. No man can be made liable by his signature being forged by another, though one may in such circumstances create a liability by acknowledging the signature as his own. In the general case, acceptance of a bill is an acknowledgment of the drawer's signature, which will make the acceptor fully liable to third parties. Acceptance is not, however, held to be an acknowledgment of an indorser's signature (Smith v. Chester, I. T. R. 654). Whoever pays a forged bill (whether a drawee, or a banker at whose house it is made payable) is presumed also to have admitted or guaranteed the signatures of the parties, and will not recover his money, unless he find out the forgery immediately, before circumstances affecting the position of other parties have intervened, and send notice on the day on which he made payment. A perty person so paying will not have recourse on the party who appears, through means of forgery, as drawer of an unaccepted or acceptor of an accepted bill. A party person so paying will not have recourse on the party who appears, through means of forgery, as drawer of an unaccepted or acceptor of an accepted bill. A party who pays for honour is under like liabilities should the name of the person he has so paid for have been forged. "Whoever," says Mr Justice Bayley, "pays a bill, should be satisfied that it is, in all its parts, genuine; if he be not, he will pay it at his peril, and will lose his remedy against the party on whose account he pays it "(322). In the case of vitiations and alterations, this distinction has to be considered; that where, through the explessness of the original makes of the downit" (322). In the case of vitiations and alterations, this distinction has to be considered; that where, through the careleseness of the original maker of the document, facilities have been left for alteration without detection (as where room is left for adding a word to the sum and thereby increasing it), he will be responsible for what appears on the face of the paper. (Bayley, 318-324. Chitty, 286, 287, 628.) FOULARD, a kind of gause riband made in France.

FRANC, the unit of the monetary systems of France and Belgium, is a silver coin, worth about 9\frac{1}{2}d. sterling; the Italian livre, forming the integer of account in Genoa and other places, is of precisely the same value. The Swiss franc, introduced during the existence of the Helvetic Confederation, is equal to about 1\frac{1}{2} French franc or 18.2d sterling.

franc, or ls. 2d. sterling.

The mutual conversion of French and British money is, for general purposes, readily accom-

shed by reckoning 25 francs $= \pounds 1$, or 100 francs $= \pounds 4$; an equation which furnishes us with following rules:—

1. To convert France into Pounds.
LE.—Cut off the last two figures, and mul-

tiply the remainder by 4.

Ex. In 2500 france how many pounds?

25 00

2. To convert Pounds into France.

Rulz.—Divide by 4, and add two ciphers to the quotient.

Bx. In £100 how many francs?

4 ∤ 100

FRANCE, a powerful kingdom advantageously situated in the W. part of Europe, between latitude 42° 20′ and 51° 5′ N., and longitude 4° 50′ W. and 8° 20′ E. It is bounded N.W. and N. by the English Channel and the N. Sea; N.E. by Belgium, Luxemburg, and the Rhenish provinces of Prussia and Bavaria; E. by Baden, Switzerland, and the Sardinian States; S. by the Mediterranean and Spain; and W. by the Bay of Biscay and the Atlantic. Including Corsica, it is divided into 86 departments, designed from their geographical position; 363 arrondissements, named from their chief towns; 2834 cantons; and 37,187 communes or parishes. Area, nearly 53,000,000 hectares, or about 204,000 British square miles. Population in 1836, 33,540,908, or 164 to the square mile. Capital, Paris, an inland town situated on the river Seine, and in the department of the same name, in lat. 48° 50 N., and long. 2° 20′ E., about 210 miles in a direct line S.E. of London; population in 1836, 999,126. From the expulsion of Charles X in 1830, to the abdication of Louis Philippe in February 1848, France was governed by a limited monarchy, with Ans. £100. Philippe in February 1848, France was governed by a limited monarchy, with a house of peers, and a representative chamber of 459 members, chosen by electors paying £8 of direct taxes. In 1849, the monarchy was replaced by a republic, with Louis Napoleon, the nephew of the Emperor, for its President; but on Dec. 2. 1851, the President subverted by military force the republic, and promulgated a new form of rule, which before the close of 1852 was followed by the reestablishment of the empire, Louis Napoleon being declared Emperor, by 7,559,795 votes, against 5559.

gated a new form of rule, which decore the close of 1002 was followed by all operated stablishment of the empire, Louis Napoleon being declared Emperor, by 7,559,795 votes, against 5559.

Physical Character.—France generally exhibits a level, but not undiversified surface. The most level tracts are in the north. The elevated portions are chiefly in the eastern and southern provinces. Of the two principal chains, one is connected with the Alps, the other, a branch from the Pyrenees, consists of the Cevennes, a long range of mountains, which, traversing Languedoc, divides the basin of the Garonne from the Mediterranean, and afterwards stretches northward in a direction parallel with the Rhone and the Saôme. In Auvergne a branch of this chain spreads into a lofty region, which exhibits very striking indications of volcanic phenomena. In respect to climate, the country has been divided into three regions: the Northern, the Central, and the Southern. In the first, limited by a diagonal line from lat 47° on the W. to 49° on the E., the waters have all a northerly course, and the temperature and produce bear a great resemblance to those of the S. of England. The Central region, bounded southward by a diagonal line, from lat. 45° on the W. to 47° on the E. comprises the country south of the Loire, and may be generally described as the basin of that river: this is esteemed the pleasantest part of France, the weather being generally clear and agreeable, while the vine flourishes, together with wheat and barley, oats and maize. In the southern region the climate approaches to that of Italy; wheat gives place to maize; the vine forms a primary object of industry, especially in the valley of the Garonne; and the olive, the mulberry, and the orange flourish.

Reval Produce.—The country generally is highly fertile.** Extensive tracts of heath occur in Guienne, Gascony, Anjou, Brittany, and Normandy, and poor districts in various other parts, but the waste surface bears only a small proportion to the arrable and pasture la

mated at nearly \$,000,000; the quantity annually produced at 40,000,000 hectolitres (880,000,000 gallous), worth about £22,000,000; while the duties imposed on its consumption amount to nearly £3,000,000. The departments in which the vineyards are chiefly situated are the Gironde, which yields about £500,000 hectolitres; Charente Inférieure, about \$2,500,000 hectolitres; Charente Inférieure, about \$2,500,000 hectolitres; Charente Inférieure, about \$2,500,000 hectolitres; Charente, 1,700,000 hectolitres; lactories and the second of Marne, Aube, and others, forming the ancient province of Champagne, as well as those of Olde 'Or, and Saone et Loire, comprised in Burgundy, though yielding a smaller quantity than many others, are distinguished for the superior quality of their wines. About one-aixth of the wine is converted into brandy; that used for exportation is chiefly made in the Bordelais, but the best is that of Charente, which furnishes the Cognac. [Winz. Baanv.]

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The departments of the superior of the superior of the following the superior of th

regulation. The principal manufactures are those of silk, woollen cloth, linen, cotton, Iron and hardware, leather, and sugar.

The French silks are distinguished by superior taste and elegance, qualities for which they are unrivalled in any other part of Europe, or indeed of the world. The number of looms in 1829 was estimated at 85,000, employing 170,000 hands; and their annual produce at 7, 300,000,000 (£12,000,000). This truly national manufacture is principally carried on in the vicinity of the districts where the raw silk is produced. Its chief seat is Lyons; but it likewise exists on a considerable scale at Nimes, Avignon, Annonsy, Tours, and Paris, at which last it has recently received a great augmentation. Ribands are made at 8E Etienne, and 8t Channon near Lyons. The woolten manufacture, besides being of great importance, is also one of those that appears well adapted to the country; and of late years it has increased materially. The estimated value of the goods manufactured in 1839 was ft. 965,000,000 (£10,600,000). Its principal localities are soliolv:—Broadcloths are made at Elbeuri, Louviers, and Vire, in Normandy; at Abbeville; at Sedan; and in the S. at Carcassonne, Lodeve, and Castres: light fabrics, at Paris, Rheims, Amiens, and Beauvais: hosiery, at Paris, Troyes, Orleans, and at different places in Picardy; and in the S. at Nimes, Lyons, and Marseilles: carpetes, at Paris, Abbeville; Aubusson, and Felletin: shawls, including cashmeres, are made at Paris, Lyons, Nimes, and St Quentin, Cambray, Valenciennes, Douay, and other places. The annual value of these different manufacture besides exists in Dauphlny. Lace is made at Alençon, Caen, and Bayeux, in Normandy; also at Valenciennes, Douay, and other places. The annual value of these different manufactures is estimated at 8.000,000 (£10,000,000).

The cotton manufacture is carried on principally in the N. and E. departments. Its chief seat is Rouen, the Manchester of France; to which town it bears the further resemblance of being situated within nearly the same distance of Havre that Manchester is from Liverpool. This manufacture also exists on a very considerable scale at Paris, Troyes, and St Quentin. Printed

calloose are made at Rousen and Besuvula; and at Colmar and Mohlanasen, in the department of Hast-Rhin. This manufacture, under the influence of high protecting duties, has increased faster than any other since 1815, and it now nearly supplies the home demand. But beyond this limit is will not probably be much advanced; as, although the Prench case of the brightness and durability of their dyes, their machinery is more expensive and ies improved than that of the cities of Glasgow. The estimated value of the cotton goods manufactured in 1829 was fr. 225,000,000, or 25,000,000, or 26,000,000.

Wrought-iron goods are made at Group Research, 18 Bennet-to-Dusert, and Verzon; rickal and Best; breas and time wares at Rouse and Paris; timed-plate wares at Imphy, Prof. 8t Corp., and Montastaric; wire and nalls at Laigie, Lock, Morvillar, and Romility; tools at Ambord, Toulouse, Arc., Foy, and Klingenthai; drearms and other weapons, at Tulle, Paris, 8t Ettemor, Toulouse, Arc., Foy, and Klingenthai; drearms and other weapons, at Tulle, Paris, 8t Ettemor, Toulouse, Arc., Foy, and Klingenthai; drearms and other weapons, at Tulle, Paris, 8t Ettemor, Toulouse, Arc., Foy, and Klingenthai; drearms and other weapons, at Tulle, Paris, 8t Ettemor, Toulouse, Arc., Foy, and Klingenthai; drearms and other weapons, at Tulle, Paris, 8t Ettemor, Toulouse, Arc., Foy, and Klingenthai; drearms and other weapons, at Tulle, Paris, 8t Ettemor, Toulouse, and Paris; and of lead, at Paris and Tours, Goods of this, platina, mercury, and antimory, chiefly at Paris, and of lead, at Paris and Tours. Goods of this, platina, mercury, and antimory, chiefly at Paris, at November 200, and the paris and the paris and of lead, at Paris and Tours. Goods of this, platina, mercury, and antimory, chiefly at Paris, at the paris and the paris

longest of all (230 miles), which runs between Nantes and Brest. The total number complete in 1837 was 74; besides which, 16 were in process of construction, and 14 others were projected. The External Trade, though considerable, is by no means commensurate with the natural productive powers of the country, its advantageous position, or the ingeneity and enterprise of the people. This is mainly to be ascribed to the system acted upon by successive government of protecting native industry, and excluding foreign products, with the view of rendering France independent of other countries. This system was introduced in 1867 by M. Colbert, then minister of finance to Louis XIV.; and the prestige that has attached to his name has tended materially to prolong this regulating mania. Its depressing effects are now seen and acknowledged by the generality of the mercantile class, and even by the government; but the influence of both has hitherto been overpowered and superseded by a combination of the sinister interests which it has been the means of creating; and even since the return of peace in 1815, the ordonnances of a perincious tendency have been many and stringent, while those of a liberal character have been few and unimportant. The principal articles of export are,—wine, brandy and liqueurs, salt, raw skeel, and colonial produce re-exported; besides the following manufactured goods, namely, silks, wood, allows, hardwares, perfumery and articles of fashion, hats, jewellery, and household furniture. The chief articles of import are,—of raw materials, silk, wood, hemp, flax, and cotton; of metals, iron and steel, lead, copper, tin, and bullion; of manufactured goods, hardwares and linen yarm; of colonial, tobacco, sugar, and coffee; besides the following miscellaneous articles, raw hides, tallow, bones and household furniture. The chief articles of import are,—of raw materials, silk, wood, hemp, flax, and cotton; of metals, iron and steel, lead, copper, tin, and bullion; of manufactured goods, hardwares and linen yarm

STATEMENT of the Value of Merchandise imported into, and exported from France, dividing the Articles into certain Classes, and distinguishing the Trade by Sea and by Land, in the Year 1838.

DESCRIPTION.	1	MPORTS		EXPORTS.			
DESCRIPTION.	By Sea.	By Land.	Total.	By Sea.	By Land.	Total	
Animal Productions.	£	£	£	£	£	£	
Live Animals	28,710				294,600	439,660	
Animal Produce	3,223,738	5,041,844		2,790,873	329,118		
Produce of Fisheries	678,995	25,858	704,153	136,102	15,489	151,584	
Perfumery	42,843	23,403	66,246	96,150	4,670	30,820	
Hard Substances for Carving	118,596						
VEGETABLE PRODUCTIONS.							
Farinaceous Food	719,686	134,802	854,488	894,642	85,771	910,413	
Fruits	899,829	273,532		347,156	82,719	429,875	
Colonial Produce	4,404,809	57,086	4,461,895		307,728		
Vegetable Juices	1,449,610	39,269			123,024		
Medicinal Substances	108,529 828,530	17,525 507,400					
Common Wood (Timber) Exotic Woods (Hard Woods)	239,361	3,622	242,983	37,813			
Fruits, Stalks, and Filaments,		0,002	,000	0,,010	0,400	11,002	
for manufacturing purposes	4,737,311	121.845	4,859,156	292,766	718,369	1,011,135	
Dyes and Tanning Stuffs	181,178	26,909	208,087	439,578	280,6.6		
Other Produce and Waste	16,180	64,819	80,999	81,090	89,839		
MINERAL PRODUCTIONS.							
Stones, Earths, and other						l	
Fossils	427,236						
Metals	1,650,030	409,552	2,059,582	314,005	286,253	600,258	
MARUFACTURED GOODS.							
Chemical Preparations	239,101	22,305			99,342		
Prepared Dyes	1,286,438	24,102	1,310,540	204,517	145,833	350,350	
Colours	13,076	16,012	29,088	37,557	40,875	78,439	
Various Compositions Liquors, of all kinds	103,283	173,122	276,405	701,706	337,077	1,038,783	
Vitrifications	45,839 43,594	8,640 35,809	54,479 79,333	2,635,819 538,958	262,653 147,228	2,898,472 686,186	
Threads	865,357	131,277	996,634		107,257	199,496	
Woven Goods and Felt	1,840,229	2,918,337		11,936,944	4,880,429	16,816,678	
Paper, and Fabrications of the				1 ' '			
same	42,795	39,025	81,820	397,532	210,266	607,798	
Various Manufactures	934,447	917,175	1,851,622	3,452,905	1,381,330	4,833,535	
Total	25.168.553	12.313.626	37.489.179	97,791,154	10.445.152	38 938 306	

STATEMENT showing the Amount of the Import and Export Trade of France with the different Countries of the World, in the Year 1838.

/	one Count				
	Importa.	Exports.		Imports.	Exports.
Europe.	£	£	China	£48,149	£11.515
Russia	1,292,819		Cochin-China, &c	53,751	
Sweden	202,711			1 -0,,,0,	1
Norway	440.339		America.	l	İ
Denmark	33,144		United States	5.311.827	6,827,92
Prussia	838,762		Havil	290.413	0,037,33
Hanse Towns					
Mecklenburg-Schwerin.	397,352		British Possessions	· · · · · · · · · · · · · · · · · · ·	28,04
Wetlenburg-Schwerin	14,194	15,275	Spanish	459,676	
Holland	837,359	877,014	Danish — Dutch —	35,981	
Belgium	3,723,856	¥,206,461	Datch	J	826
Great Britain	3,797,701		Brazil	379,425	
Portugal, Azores, &c	61,080	90,113	Mexico	176,603	
Spain	1,418,592	3,033,093	Central America	106,690	
Austria	206,197	411,678	Venezuela	51,361	70,396
Sardinian States	4,469,388	2,380,815	New Granada	19,784	
Two Sicilies	899,033	541.782	Peru	890	103,896
Tuscany	632,360	719,091	Bolivia	i	14,376
Roman States, Lucca	38,373	107.897	Chill	139,333	307.348
Switzerland	2,678,000	3,445,893	States of Rio de la Plata	255,319	
Germany	2,180,175	1,794,017			
Greece	15,713	84.367		l	i
Turkey	1,090,995	857 970	Guadaloupe	860,474	607,700
	2,000,000	W/,2/8	Martinique	684,496	623,780
Africa.			Bourbon	844.824	549.838
Egypt	137.839	123 000			
Algiers		101,000	Senegal	212,455	
Barbary States	66,697	1,011,431	Cayenne	109,399	136,699
Come of Class III	940,137	X10,566	St Pierreand Miquelon,	488,976	227,171
Cape of Good Hope and	24,172	273,328	and the fisheries		
Mauritius}			AA TACKED STRIT BOOK ASK G	14,750	• • • •
Other parts	22,933	52,710			
	l.		Total merchandise	57,482,179	38,236,306
Aria.			Specie imported (one-)	6,907,087	
E. Indies, British, and	723,204	108,481	halffromGreatBritain)		
_ Australia			Decre exported		2,288,936
E. Indies, Dutch	249,194	<i>5</i> 7,355			
French	212,344	17,361		44,389,266	40,525,249

STATEMENT showing the Number and Tonnage of Vessels engaged in the Foreign Trade of France, which Entered and Cleared at Ports in that Country, distinguishing French from Foreign Vessels, and those employed in the Direct from those employed in the Carrying Trade, also the Value of their Cargoes, in the Year 1838.

Vessels and Trade.	Entered.			Cleared,		
Vesses and I rade.	Vessels.	Tons.	Cargoes.	Vessels.	Tons.	Cargoes.
French, exclusive of coasters Foreign, in direct trade with the country to which they belong foreign, in carrying trade	6,081 6,812 1,194	844,213	£ 12,695,120 16,671,384 1,802,044	5,126	463,342	£ 11,040,156 14,340,416 2,410,568
Total	14,087	1,671,824	25,168,548	11,877	1,181,347	27,791,140

The number and tonnage of merchant vessels, which belonged to the ports of France on 31st Pecember 1838, were as follows:—0f 30 tons and under, 10,623; between 30 and 60 tons, 1019; between 60 and 100 tons, 1515; between 100 and 200 tons, 1835; between 300 and 60 tons, 1019; between 600 and 700 tons, 21; of 800 tons (3164) and 200 tons, 685; between 600 and 600 tons, 15; between 600 and 700 tons, 2; of 800 tons (3164) and upwards, 1; total number of vessels, 15,336, and of tons, 636,978.

The Trade between France and Great British is inconsiderable, when viewed with reference to the vast capabilities of the two countries to supply their mutual wants, and to their near neighbourhood to each other. This is to be attributed to the exclusive policy introduced by M. Colbert, and afterwards imitated in our own country; and to the long continuance of that feverish state of mutual jealousy and haired which was ever and anno breaking out into fierce and protracted contests of arms,—influences which, until a recent period, have led the two nations to act as if each had no higher interest than at any cost to keep itself independent of the other, and to their commercial intercourse being, as it was in most other respects, little more than a connexion of opposition. At one period, indeed, counter views seemed likely to prevall. In 1786, Mr Pitt concluded the treaty commonly called the Eden treaty, after Mr William Eden (subsequently Lord Auskland), the negotiator, which was favourable in the highest degree to the extension of commercial relations between France and Great Britain; but this treaty continued in operation only until 1791, when its provisions were supplanted by a new tariff, reimposing the former prohibitory duties; and the

system then restored may be said to have been adhered to down to the present day, at least on the part of France, in all its teading principles.

At different periods since the peace of 1815, attempts have been made to extend commerce between the two countries. In Great Britain, the discriminating duty on French winess has been repealed; the silk manufactures, formerly prohibited, are now admitted upon a scale of duties which causes a considerable trade in them to be carried on, and at various times the duties; while in France these concessions have been many minor articles of French produce; while in France these concessions have been met with a corresponding spirit. But viewed as a whole, what has been effected is trifling, when compared with what yet remains to be done. Those great British staples, coal and iron, articles of which France is dedicient, are yet loaded by her with prohibitory duties; restrictions are likewise imposed by her on hardware, cutlery, cottons, yarns, and many other products of English industry. On the other hand, the duties levied in the United Kingdom on brandy, and even many descriptions of French silks and wises, are much too high. Happily the importance of further relaxations is appreciated by the two governments, as well as by the great body of the consumers in both countries, so that there is now some prospect that their commercial intercourse will be allowed to grow up to its natural level.

TRADE of the United Kingdom with France at different Periods.

		Official	Value.		Declared Value
1		1	of British and		
Years.	Imports from France.	British and Irish produce and manufactures.	Foreign and Colonial Merchandise	Total Exports.	and Manufac- tures exported to France.
1785	£ 334,370	£ 368,037	£ 354,090	£ 799,067	£
1795	41,690	199	78,653 363	78,653	
1805 1815	494,749 754,372	214,894	1,228,856	1,443,690	298,292
1890	775,139	334,087	829,814	1,163,901 1,171,615	390,745
1825 1830	1,835,985 2,317,686	279,919 486,984	899,403 181,065	667,349	360,710 475,884
1835	2,746,999	1,561,915	505,346	2,067,961	1,453,636
1836	3,125,978	1,700,665	644,950	2,345,615	1,591,381
1837 1838	2,707,887 3,431,119	2,036,844 3,193,923	839,907 691,080	2,876,051 3,885,003	1,643,204 2,314,141
1839	4,092,596	3,118,410	514,243	3,632,653	2,298,307

1839 4,032,536 3,118,410 514,943 3,635,633 2,314,141 1839 4,032,536 3,118,410 514,943 3,635,633 2,336,377 The principal exports from France into the United Kingdom in the year 1839 were as follow:—Apples (official value), £30,636; baakets, £6630; books, £13,739; boracic acid, 211,038 lhs.; boxes, £13,533; brimstone, 199,104 cwts.; clocks, £27,009; cork, £331 cwts.; wheat, 276,181 quarters; bane, 15,356 quarters; beams, \$7,004 quarters; other grain, 8396 quarters; flour, 115,502 cwts.; cotton manufactures, £41,700; eggs, No. 90,834,163; needlework, £19,633; flax and tow, 73,607 cwts.; flowers, artificial, £20,933; furs, martin, No. 13,806; glass of cutters, 115,436 qts. Imp. measure; hair, human, 8361 lbs.; hat of straw, No. 5801; hemp, 19,546 cwts.; leather manufactures, viz. gloves, 1,007,839 pairs; boots and shoes, 48,634 pairs; and other sorts, £7612; madder, 58,044 cwts.; madder-root, 13,211 cwts; nuts, viz. walnuts, 14,131 bushels; oil of olives, 11,113 gallous; and of thyme, 6667 lbs.; ochre, 3779 cwts.; paper for hangings, 28,444 sq. yds., and other sorts, 61,946 lbs.; pictures, No. 2316; platting, &c. for straw bonnets, 34,937 hs.; plums and prunelloes, 8166 cwts.; prunes, 18,936 cwts.; prints and drawings, No. 113,903; quinine (sulphate of), 55,477 ounces; rapeaced and other oil cakes, 287,933 cwts; salt, 39,476 bushels; seeth, clover, 26,530 cwts.; onion, 42,399 lbs.; tares, 29,040 bushels; silk (chiefly re-exported from fixly), raw, 1,018,001 lbs.; waste, knubs, and husks, 568,754 lbs.; thrown, dyed 1711 lbs., and undyed 121,830 lbs.; other sorts, £130,925; akins, kid, 639,935; spirits, brandy, 1,335,172 gallous; wool, sheep's, 83,141 lbs.; woollen manufactures, lance, flowing ribands, 182,177 gallous; wool, sheep's, 83,141 lbs.; woollen manufactures, £135,713. The chief articles on which an increase has taken place of late years are raw silk and silk manufactures, manely, calicoes, muslins, fustians, &c., 2,731,568 yds, £25,628; lsee and manufactures, manely, calicoes, muslins, fustians, &c., 271,56

bandanas and handkerchiefs) and cottons, abellac, goet's hair manufactures, indigo, castor oil, pepper, quickailver, precious stones, satipetre, spelter, and cotton wool.

In addition to the trade just described, a considerable intercourse is conducted by those effectual reformers of faulty tariffs,—the smugglers. This illicit trade chiefly consists in conveying brandy from France to the S. coast of England, and in Introducing some descriptions of yarus and lace into the former, across the frontier by way of Belgium. A great deal of curious information upon this subject is to be found in the Reports in 1832 and 1834, by Mr Villiers and Dr Bowring, on the commercial relations between France and Great Britain; though, since these reports were made, it is believed that in some branches, especially that of yarus, the irregular trade has decreased.

the former, across the frontier by way of Selgium. A great deal of curtous information upon this subject is to be found in the Reports in 1623 and 1824, by Mr Villiers and Dr Bowring, on the commercial relations between France and Great Britain; though, since these reports were more and the believe that in some branches, especially that of parish, the bringular trade has decreased.

PARICIAL FORTS ON THE ATLANTIC.

These, stated in their order along the coast from N. to S., are, Dunkirk, Calais, Boulogne, St. Valler, sur Somme, Dieppe, Fecamp, Harfleur, Le Harve, Hondeur, Chen, Cherbourg, Granville, St. Malo, Brest, L. O'rient, Nanice, L. & Rochelle, Rochefort on the Charvent, Bordeaux, and Exymns. Those of Cherbourg, Brest, and L. O'rient are, as is well known, principal stations of the Parish of the Cherbourg, Brest, and L. O'rient are, as is well known, principal stations of the Parish of the Cherbourg, Brest, and L. O'rient are, as is well known, principal stations of the Parish of the Cherbourg, Brest, and L. O'rient are, as is well known, principal stations of the Parish of the Cherbourg, Brest, and L. O'rient are, as is well known, principal stations of the Parish of the Cherbourg, Brest, and L. O'rient are, as is well known, principal stations of the Parish of the Cherbourg, Brest, and L. O'rient are, as is well known, principal stations of the Parish of the Cherbourg, and the Cherbourg, Brest, and L. O'rient are, as is the Mouth. It is a free port; and, before the Cherbourg, Brest, and the Cherbourg, and the Cherbourg, Brest, and the Cherbourg

PRINCIPAL PORTS ON THE MEDITERRANEAN.

These, stated in their order from E. to W. are, Toulon (a celebrated station of the French navy), [arseilles, Arles, Cette, Agde, Port-Vendres.

FRA

Catte, in lat. 43° 24′ N., long. 3° 49′ E., is situated in the department of Hérault, on the marrow stripe of land which separates the étang or lagoon of Thau from the sea. It forms one embouchure of the Great Canal of Languedoc, a circumstance to which its rise and prosperity is alone attributable, as the port is not very good, nor has it the natural facilities for becoming so: it has also a canal communication with the Rhone; pop. 11,648. The harbour, which has from 16 to 19 feet water, and can accommodate about 400 vessels, is formed by two lateral moles, with a breakvater across the entrance. The moles are fortified, and on the principal one is a lighthouse, elevated 84 feet above the level of the ess. A considerable trade is carried on in the wines and brandies of Languedoc, of which Cette is the depot. The salt-works on the adjoining lagoon are pretty extensive; as are also the fisheries, particularly that of sardines. About 130,000 tons of shipping (knoluding coasters) enter annually.

Marsellies, in lat. 43° 17′ N., long. 5° 29′ E., is the principal commercial city and port of France. It is seased at the upper end of a guif, covered and defended by many small islands, and is divided into the old town, or the city, and the new. In the former, the streets are narrow, and the houses mean; but in the latter, which communicates with the old by a fine street, the squares and buildings are beautiful; pop, about 185,000. Marsellies has been called Europe in miniature; it is the resort of foreigners of all mations, and the variety, continual buttle, and medley of languages which this occasions, are among its most striking features. The harbour is an oval, of more than half a mile long, and about a quarter of a mile bread, formed by a small inlet of the sea, running castward into the heart of the city, which is built round it; and is capable of accommodating about the mouth of it, which is narrow, not permitting the entry of more than one ships at a secure anchorage, where vessels perform quarantine. Exports, chi

CORSICAN PORTS

Consider Ports.

Bastia, the principal town and port, is situated on the E. coast, in lat. 42° 43′ N., long. 9° 26′ E.; pop. 12,846. The port is unsafe, and not adapted for large vessels. At its entrance is the celebrated rock "Il Leone," so called from its resemblance to a lion in repose, which answers the purpose of a breakwater. Exports, oil, wine, cattle, hides, goat-skins, coral, and wood. It carries on a considerable intercourse with Leghorn, from whence British manufactures and tobacco are smuggled into the island.

Ajaccio lies in a guif on the N. side, in lat. 41° 58′ N., long. 8° 44′ E.; pop. 9000. Exports, wine, oil, and coral.

MEASURES, WEIGHTS, MONEY, FINANCES, &c.

MEASURES AND WEIGHTS.

The French measures and weights may be assed under three heads:—1. The Metrical ystem. 2. The Système Usuel. 3. The An-

1. The Metrical System,

In the Metrical System,
Instituted in 1796, is used in government transactions, in wholesale trade, and for actentific purposes. It is founded upon the distance of the pole from the equator, the ten millionth part of which, denominated a webre, is decreed to be the unit of length. The other units are—of surface, the are; of solidity, the stre; of capacity, the live; and of weight, the grosses; and the Latin derivatives decited the off, could have present the unit. (tenth of), cents (hundredth of), settis (thousandth of), being prefixed to that appreasing the unit, serve to denominate its subdivisions; while the Greek derivatives afect (ten), heete (one hundred), his (thousand), sepries its multiples. Thus ded-metre denotes the 1-th of a maker and them parts 10 metre denotes the 1-th

Money, Finances, &c.

35-316581 Imp. cubic feet or 1:306022 Imp. cubic yd.; and 10 stères = 1 décastère.

Litre (or cubic décimètre), of 10 decilitres, or 100 centilitres = 61027082 Imp. cubic inches = 0.320037 Imp. gall., or about 12 Imp. pint; and 50 litres = 14 Imp. galls. nearly. 100 litres, or 10 décalitres = 1 hetolitres = 3751207, or about 32 Imp. bush.; and 32 hectolitres = 11 Imp. qrs. nearly. 100 hectolitres, or 10 kilolitres (or cubic metres) = 1 myrislitre = 34:3200065, or about 34 Imp. qrs. 3½ bush.

Grammes, veighing 1 cubic centimètre of water at its maximum of density, and containing 10 décigrammes, or 100 centigrammes = 15:434 troy grains; 1000 grammes, 100 décagrammes, or 10 decigrammes, or 10 decigrammes = 2 lbs. 30s. and 47 drams, or 2:30487 lbs. avoirdupois; and 288 kilogrammes = 635 lbs. avoirdupois nearly; 100 kilogrammes, or 10 myriagrammes = 1 metrical quintal = 220485 lbs. avoirdupois or 1 cwt. 3 qrs. 24 lbs. 73 cunces nearly; and 10 quintals, the weight of a cubic mètre of water = 1 millier or marine ton = 19 cwt. 2 qrs. 30 lbs. 133 os.

is multiplies. Thus deci-mètre denotes the 71 per la mètre, and déca-mètre 10 mètres.

Mêire of 10 décimètres, 100 comit-mètres, or 1000 millimètres = 1'093533 Imp. yard, or nearly 394 Imp. Inches ; and 32 mètres = 35 Imp. yard, a nearly :—1000 mètres, 100 décamètres, or 10 décamètres, or 100 décamètres = 1 myrismètre, or metrical lesque = 6'213394 Imp. yds., or nearly 3 sq. poles and 2's yds.

Aire (100 sq. mètres), or metrical perch of 10 décares, or 100 centiares = 119'6033 Imp. sq.

yds., or nearly 3 sq. poles and 2's yds.

déclares, or 100 centiares = 119'6033 Imp. sq.

yds., or nearly 3 sq. poles and 2's yds.

déclares, or 100 centiares = 119'6033 Imp. sq.

yds., or nearly 3 sq. poles and 2's yds.

chre (100 sq. mètres), or metrical perch of 10 déclares, or 10 décares = 1 hectare = 2'47'1143 Imp.

acres = 2 acres, 1 rood, 35 sq. poles, 11s sq. yds.;

or 17 hectares = 42 Imp. acres nearly.

Stère (or cubic mètre) of 10 déclatères = 1 miller or marine ton = 19 cwt. 2 qrs.

100 lbs. 13½ oz.

2. The Spetème Usue!

Was established in 1812 for the purposes of retail trade, in consequence of the aversion shown by the common people to the innovations of the old measures necessary in the inferior department of trade, while, by a slight alteration, the value of these measures is ofted as to be retail trade, while, by a slight alteration, the value of these measures is ofted as to be retail trade, while, by a slight alteration, the value of these measures is ofted as to be value of these measures is ofted as to be a common people to the innovations of the old measures necessary in the inferior department of trade, while, by a slight alteration, the value of the seminary and the value of the seminary and the value of 1 the valu

Aune of Faris = 1'1884 mêtre = 46; 1mp., inches.

Post league, of 2000 toises or 2 miles = 3698 kilomètres or 4263 Imp. yards; Marine league of 20 to the degree, or 60 marine miles = 5*555 kilomètres = 6*76 Imp. yards; League of 25 to the degree = 4*444 kilomètres = 4690 Imp. yards. Arpent des eaux-et-forêts = 5*072 ares = 1*262 Imp. zere: Arpent commun = 42*2008 ares = 1*263 Imp. acre; Arpent de Paris = 34*1897 ares = 0*845 Imp. acre; Arpent de Paris = 34*1897 ares = 0*845 Imp. acres; 288 pintes = 9*28 litres = 58*985 Imp. gallons. Muld, corn measure of Paris, of 12 sciers, 24 mines, 48 minots, 144 bois-seaux, or 2344 litrons = 18*72 hetolitres = 5*502 Imp. bushels. Livre (Poids de Marc), of 2 marcs. 16 onces, 128 gros, 344 deniers, 2216 grains = 489*5 grammes = 75*55 troy grains; the quintal of 100 livres = 107*298 lbs. avoird.

Bondaux.—Tun of 4 barriques = 912 litres

BORDAUX.—Tun of 4 barriques = 912 litres = 900-73 Imp. galls. Velte = 12 lmp. galls. nearly.

Bondaux.—Tun of 4 berriques = 912 litres = 900.73 Imp. galls. Velte = 12 lmp. galls. nearly.

Money.

The integer of account is the franc, which is divided into 100 centimes, and is equivalent to about 94d. sterling. Prior to 1797, the money of account was the livre tournois of 90 sous each, of 12 deniers. Si livres are equal to 80 francs. The modern coins are as follow:—Gold pieces of 40 francs, worth 31s. 84d. sterling, and pieces of 90 francs, sometimes called Mapoleons, or new Louis, equal to 15s. 104d.; these are minted at the rate of 3099 francs from the kilogramme of standard metal of the fineness of 900 millièmes (thousandths), or 3000, the remody of the mint being 2 millièmes in the weight, and the same in the fineness:—Silver pieces of 5, 2, 1, 2, 3, and 4 francs, minted at the rate of 198 francs from the kilogramme of standard metal of 5 this fine, the remody of the mint, allowed both on the weight and on the fineness, varying from 3 milèmes, that on 5 franc pieces; to 10 millièmes, that on 5 franc pieces; to 10 millièmes, that on 5 franc pieces; to 10 millièmes, that on 5 franc pieces; and 1 centimes: the billon pieces for 10 centimes, or 1 déclime, contain 1th part of silver. Of the old coins the principal are the louis d'or of 24 livres, worth about 18s. 94d., the double louis d'or, and the silver écut of livres, worth sbout 4s. 64d., with halves, quarters, &c.; also the copper sou, accounted equal to 5 centimes.

The release or mint charge, according to the tariff of 1803, is 9 francs per kilogramme of gold of the purity of 900 millièmes, or 10 francs per kilogramme of fine gold, and 1 per cent. on silver. Hence, if a kilogramme of gold fiths fine carried to the mint, the amount returned in coin is 3091 franca instead of 3100 francs, the sum into which it is minted: for a kilogramme of silver fiths fine also, 197 francs only will be returned instead of 300 francs. The tixed mint prices at which gold and silver are thus issued are termed tariff rates, and all variations in their market-prices are expressed in agios or premiums upon such rates.

Toise usuelle = 2 mètres = 6 Imp. feet 64 inches.

Pied usuel = \frac{1}{2}\text{th} of the toise.}

Aune usuelle = 12 décimètres = 47\frac{7}{2}\text{Imp. pint nearly.}

Boisseau usuel = \frac{1}{2}\text{there} = 1 Imp. peck and 3 quarts, or 1\frac{1}{2}\text{peck nearly.}

Livre usuelle = \frac{1}{2}\text{lingramme} = 1 Ib. 1 os. 10\frac{1}{2}\text{dram a voird., or 7717 troy grains.}

3. The Ancient System

La still partially employed, particularly in road measures.

3. The Ancient System

La still partially employed, particularly in road measures.

Toise of 6 pleds de roi = 1-9490 mètre = 9-1315 [mp. yards, or about 6 feet 44 inches.

Aune of Paris = 1'1884 mètre = 46\frac{1}{2}\text{Imp. pinches.}

Post league, of 2000 toises or 2 miles = 3-898 [klomètres or 4263 Imp. yards; Marine league of 20 to the degree, or 60 marine miles = 5-555 (klomètres = 67/6 Imp. yards; League of 25 degree = 4-444 kilomètres = 4890 Imp. yards.

Arpent des eauvet-forèts = 51-072 ares = 1-925 [mp. pares a cavet-forèts = 51-072 ares = 1-926]

Banks, &c.

The Bask of France was established medically coins, is 25 france 32\frac{2}{2} cents for \frac{x}{2}, 1-78. 10\frac{1}{2} der ounce (British stand-ard), produced an exchange of 25 france 32 cents for \frac{x}{2}, 1-78. 10\frac{1}{2} der ounce (British stand-ard), produced an exchange of 25 france 32 cents for \frac{x}{2}, 1-78. 10\frac{1}{2} der ounce (British stand-ard), produced an exchange of 25 france 32 cents for \frac{x}{2}, 1-78. 10\frac{1}{2} der ounce (British stand-ard), produced an exchange of 25 france 32 cents for \frac{x}{2}, 1-78. 10\frac{1}{2} der ounce (British stand-ard), produced an exchange of 25 france 32 cents for \frac{x}{2}, 1-78. 10\frac{1}{2} der ounce (British stand-ard), produced an exchange of 25 france 32 cents for \frac{x}{2}, 1-78. 10\frac{1}{2} der ounce (British stand-ard), produced an exchange of 25 france 32 cents for \frac{x}{2}, 1-78. 10\frac{1}{2} der ounce (British stand-ard), produced an exchange of 25 france 32 cents for \frac{x}{2}, 1-78.

bills on London, is 30 days date. No days of grace are allowed.

The Bank of France was satablished on its present footing in Paris in 1803, but a similar national institution existed in that city under different forms and designations, from the year 1716. It received a grant for 40 years; and its rogignal capital was fr. 70,000,000, divided into 70,000 shares (actions), each of fr. 1000, which, however, was soon increased to fr. 90,000,000 (£3,600,000). The bank has since repurchased 283,100 of these shares, thereby reducing its actual capital to fr. 67,900,000 (£3,716,000). It circulates notes for fr. 500 and upwards, payable in specie on demand, receives deposits, and discounts bills of exchange; it also makes advances on bullion and other securities. It likewise undertakes the care of plate, jewels, title-deceds, and securities of all kinds; the charge for which is 4th per cent. on their value for every period of 6 months or under. Its affairs are managed by a governor and deputy-sovernor, nonlimated by o months or under. Its anares are managed by a governor and deputy-governor, nondmated by the king, and by 17 regents, and 3 censors, elected by 300 of the principal shareholders. A statement (compte rendu) of the bank's affairs is published monthly, and the following is a copy of that issued in April 1841:—

of that issued in April 1841:

Amount of buillion on hand fr. 945,697,496-23
Commercial bills discounted 129,196,094-94
Advanced on the security of buillion 14,473,100-00
Advanced on public securities 6,221,841-65
Branch banks, debtor 14,333,51470
Capital of branch banks 12,000,000-00
Amount of reserve, according to law of 1834

law of 1834
Amount vested in public securities 5,1,177,883-90
Hotel and furniture of the bank 4,000,000-00
Sundries 457,746-73

478,958,557-04

Bank notes in circulation, not comprising branch banks occuprising branch banks occuprising branch banks of the spayable to order 1,219,310-50 Treasury account-current 90,959,418-96 Sundry accounts-current 92,518,069-98 Receipts payable at sight 4,434,500-00 Capital of the bank 67,900,000-00 Reserve, according to law of 1834 10,000,000-00 Unclaimed dividends 498,195-73 Unclaimed dividends 428,195.73
Draughts of branch banks outstanding 254,849.53
Sundry accounts 3,763,228.34 Sundry accounts

479 Q58 557:04

The Bank of France has branches in various places; in addition to which, there were in 1838

the following other establishments issuing paper; namely, the banks of Bordeaux, Rouen, Lyons, Martes, Marteslike, and Lills. Of these aix debt . fr. 276,016 partmental banks, the aggregate capital, in the year just mentioned, was fr. 14,550,000; specie on hand, fr. 14,553,000; notes in circulation, fr. 33,199,000; deposits, fr. 7,971,000. Besides these, there is the Havre, and a variety of other joint-stock banks in the provinces. The Laftte Hank, lately established at Paris, issues bank bills bearing interest. Besides these, there is the Havre, and a variety of the provinces. The Laftte Hank, lately established at Paris, issues bank bills bearing interest. Foreign affairs 7,377	
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on hand, fr. 14,883,000; notes in circulation, of 35,199,000; deposits, fr. 7,971,000. Besides these, there is the Havre, and a variety of of other joint-stock banks in the provinces. The Lafitte Bank, lately established at Paris, issues Religion	
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of other joint-stock banks in the provinces. The ministry of Justice . 18,68: Lafitte Bank, lately established at Paris, issues — Religion	,300
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Dank Dills Dearing interest. 7,370	.6333
The French commercial code recognises three Linear Public instruction 12,997 kinds of commercial societies for purposes of a Interior 74,727	,673 . 276
kinds of commercial societies for purposes of a permanent nature; namely, lef, Societies "en public works, vis. —	,
Societies "en Commandite," the nature of which Ports & internal nav-	
we have already described [COMPANY]; and 3d, igation 13,135,000 Anonymous societies. These last resemble joint- Other expenses 17,934,678	
stock companies in this country. Their capital	,878
is divided into shares; each holder is liable only to the amount of those which he possesses; and Expenditure in France 202, 189,055	
the business is carried on DV a lew individuals Uccubation of Ancona 791.00x	
elected by the shareholders. Who are not nor- African nossessions 95.743.309	01.6
a report of the French Chambers, the number Ministry of marine and	,010
of companies of the two latter classes established in France from 1896 to the close of 1837, was,— Seamen and marines 22,986,300	
Societies en Commandite, 1106 : joint-stock com- Shipbuilding 18.469.600	
panies, 187. Of the former, there relate to journals, periodicals, and books, 401; manufactures, Sundries 16,343,500	
95; coaches and modes of conveyance, 93; forges, 65,000	,000
metals, and the coal trade, 60; navigation, 52; Administration of banks, 40; insurance, 27; agriculture, 25; finance 21,534	.OBO
theatres, 24; miscellaneous, 289. The shares of Collection of taxes . 119,870,150 the companies are generally divided into very Reimbursements . 53,829,134	,
banks, 40; insurance, 27; agriculture, 25; theatres, 24; miscellaneous, 289. The shares of the companies are generally divided into very small sums, some as low as 10 and 5 france. 21,534 Collection of taxes . 119,870,150 Reimbursements . 53,826,134 173,698	284
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anne and expenditure for the year 1838.	—
Or £41,450	
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ABSTRACT OF CONVENTION OF COMMERCE AND NAVIGATION between Great Britain

ABSTRACT OF CONVENTION OF COMMERCE AND NAVIGATION between Great Britain and France, January 26, 1826. (Hertslet's Treaties, vol. iii. p. 123.)

The two powers being animated by the desire of facilitating the commercial intercourse between their respective subjects; and being persuaded that nothing can more contribute to this object than to simplify and equalise the navigation regulations of both kingdoms, by the reciprocal abrogation of all discriminating duties levied upon the vessels of either of the two nations in the ports of the other;—have named as their plenipotentiaries, to conclude a convention for this purpose, that is to say, his Mijesty the King of Great Britain and Ireland, the Right Honourable George Canning and the Right Honourable William Huskisson; and the Right Honourable William Huski

of Great Britain and Ireland, the Right Honourable George Canning and the Right Honourable William Huskisson; and his Majesty the King of France and Navarre, the Prince Jules, Count de Polignac; who have agreed upon and concluded the following articles:—

I. French vessels coming from or departing for France, or, if in ballast, from any place, shall not be subject in the ports of the U. K. to any higher duties of tonnage, harbour, light, pilotage, or other similar duties than those to which British vessels, in respect to the same voyages, are subject; and, reciprocally, British vessels placed on the same footing in the ports of France. But the French king reserves to himself to regulate the amount of such duties in France according to the rate at which they may be established in the U. K.; with the disposition, however, to reduce the amount of the said burthens in France in proportion to any reduction hereafter made of those now levied in the U. K.

II. Goods which may be legally imported into the U. K. from France, if imported in French vessels, shall be subject to no higher duties than Imported in British vessels; and reciprocally as regards importations in British vessels into France. The produce of Asia, Africa, and America, not being allowed to be imported into the U. K. (except for warshousing and re-exportation) in French vessels, nor from France in British vessels, nor from the U. K. in Ike manner, such produce shall not be imported into France (except for warshousing and re-exportation) in British vessels, nor from the U. K. in French vessels. With regard to Buropean productions, it is understood that such shall not be imported in British bips into France for consumption, unless laden therewith in some port of the U. K.; and the British king may adopt, if he think its, some corresponding restrictive neasure with reference to French vessels.

are payable by Messrs Rothschild, at the current rate of exchange, upon the coupons being left for the expenses of the army of occupation a few days at their office. In order to assign (£18,985,594), and the contributions paid to the the inscribed rentes, however, the seller must allies (£25,365,594). A considerable angmentagrant a power of attorney, authorising some tion of charge was also occasioned between 1821 party in Paris to sign the transfer in the record and 1833 by the invasion of Spain; in 1826, by the invasion of the Morea; and in 1830, and submessed in the state of circumstances which arose out inscribed rentes are payable in Paris, where they can be received by an agent, duly authorised by power of attorney.

The public debt of France, after deducting the sinking fund, now exceeds £200,000,000 sterting. It has increased considerably since the first four years of the period owing the depth of the following the sinking fund, now exceeds £200,000,000 sterting. It has increased considerably since the first four years of finance, that the debt revenues during the 59 years that have since the hostile demonstrations which arose out of elapsed having been seldom equal to the expension of Paris.

Are the contraction of the part of the fortifications of Paris.

Are the contraction of the part of the period owing the case of increased debt has to be added the line of policy adopted by M. Thiers in 1840, and the fortifications of Paris.

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case obtain more favourable conditions than those herein stipulated.

V. Fishing boats of either country forced by stress of weather to seek shelter in the other, not subject to duties or port-charges, provided they have not effected any landing or shipment of growth.

of goods.

VI. This convention shall be reciprocally in force in all European possessions of the two

powers.

VII. The convention to exist for 10 years from
April 5, 1826; and further, until the end of 12
months after either of the parties shall have given
notice to the oth.r of its intention to terminate

its operation.

Additional Articles (Jan. 26, 1826).

I. French vessels allowed to sail from any French possession to all British possessions (except those of East India Co.), and to Import into them all kinds of goods produced in French possessions, except such as are prohibited to be imported into said colonies, or are only permitted from British possessions; and the said French vessels and merchandise shall not be subject to higher duties than British vessels importing the same merchandise from any foreign country, or which are imposed on the merchandise itself.

The same facilities shall be granted reciprocally in the colonies of France. And as all foreign merchandise may now be imported into British colonies in the ships of the country producing the same, except a limited list of articles, which can only be imported in British ships, the king of the U. K. reserves the power of adding to such excepted articles any other of French produce which may appear necessary for placing the colonies of the two countries upon a fair footing of reciprocity.

It Similar privileges, reciprocally granted to

the colonies of the two countries upon a fair footing of reciprocity.

II. Similar privileges, reciprocally granted to the vessels of the two powers exporting merchandise from their respective colonies.

These two articles to have the same validity as if inserted in foresaid convention.

FRANKFORT, a small republican state on the confines of Bavaria, consisting of the city of Frankfort on the Maine and the adjacent territory. Area, 90 sq. miles. Population, 63,936. The government is vested in a senate, a permanent committee of burgesses, and a legislative body.

The city of Frankfort is now the chief money market of Central Germany, and banking, including exchange operations, is its principal source of wealth. It is likewise a piace of considerable transit

for wines, English, French, and Italian goods, German wools and manufactures, and colonial produce; while the inhabitants of the adjacent villages, within the republic, follow the occupation of carriers through many states of Germany. Two extensive fairs are held in the city; one beginning properly on Easter Tuesday, the other on the Monday nearest to the fof September; but they usually commence from one to two weeks previously. The trades at these fairs, however, as well as of the town in general, which is that of an entrept, has declined since the establishment of the Prussian Commercial Union, the effect of which has been to remove those obstacles to free intercourse which previously existed between many of the German States. This Union was at first resisted by Prankfort, but being surrounded on all sides by confederated states, it was obliged to give its accession, in order to prevent the greater evil of absolute isolation.

**Mesoners and Wichter The foot — Il-19 into the tentanged of the money in which they

The achtel or malter of 4 simmers, 8 metsen, or 16 sechters = 3·16 imp, bushels.

The heavy pound contains 2 marcs, 52 loths, 129 drachmes; the light pound is similarly divided, and 100 heavy ibs. or centner weight = 100 lbs. light weight; also 100 lbs. leavy weight = 111·43 lbs. avoird., and 100 ibs. light weight = 103·18 lbs. avoird., and 100 ibs. light weight = 103·18 lbs. avoird. and 100 ibs. light weight = 103·18 lbs. avoird. and 100 ibs. light weight = 103·18 lbs. avoird. and 100 ibs. light weight = 103·18 lbs. avoird. and 100 ibs. light weight = 103·18 lbs. avoird. and 100 ibs. light weight = 103·18 lbs. avoird. and 100 lbs. light weight = 103·18 lbs. avoird. and 100 lbs. light weight = 103·18 lbs. avoird. and 100 lbs. light weight = 103·18 lbs. avoird. and 100 lbs. light weight = 103·18 lbs. avoird. and 100 lbs. avoird. and 100 lbs. lbs. avoird. and 100 lbs. avoird. and 100 lbs. avoird. and 100 lbs. avoird. and 100 lbs. avoird. avoird. avoird. and 100 lbs. avoird. a

to give its accession, in order to prevent the greater evil of absolute isolation.

Measures and Weights.—The foot = 11·43, ing to the standard of the money in which they and the ell 21·64 Imp, inches, or 100 ells = 50·80 and the ell 21·64 Imp, inches, or 100 ells = 50·80 and the ell 21·64 Imp, inches, or 100 ells = 50·80 and 100 ells = 50·80 and 100 ells = 50·80 ells = Convention florins; and as the value of the Convention florin is 34-37d., we have in Wechsel-Zahhing the florin = 34-32d., the rixdollar = 36-43d., the batze, in which the exchange with London is recknoned = 1-52d., and the par 143½ batzen per £1.

Usance of bills not payable at the fairs is 14 days' sight. The days of grace are 4; but none are allowed on bills at less than 4 days' sight or data.

Figuraces.—Annual revenue about £57,000.

MANY.

Money.—Accounts are stated in florins of 60 krousers, or in rizdollars current of 90 krousers; and I rizdollar = 14 florin = 292 batsen. These denominations, however, differ in value accord-FRANKINCENSE, a name given to OLIBANKINGENSE, an ame given to OLIBANKINGENSE, the former is the Thus or frankincense of the ancients.

the former is the Thus or frankincense of the ancients.

FREIGHT in the contract of affreightment [Affreightment] is the sum which the merchant pays for the safe conveyance of cargo or the use of the vessel. Freight is generally said not to be strictly due, except on the arrival of the vessel with the cargo. If it has been necessary to abandon the vessel, however, freight will be earned by conveying the goods to their destination by the best method which circumstances will admit of. Freight will not be lost in consequence of interruption, such as capture and recapture. If goods be thrown overboard, in pursuance of the Lex Rhodia de jactis, freight must be paid, and ranked [Average]. If the freight is calculated by time, it begins to run from the period of the ship's breaking ground and commencing her voyage. When, in the case of a charter-party, in which the merchant bargains for carrying so much cargo, and he fail to produce the full quantity, compensation is due for the damage to the owner, by reason of his having to look out for another cargo, or to let his vessel lie partly unoccupied: this is occasionally called Dead Freight. The shipmaster has a lien on the cargo for freight; but there is none on the goods conveyed for dead freight. If the merchant demand his goods before the stipulated voyage has been accomplished, full freight is due. In a charter-party, the shipper is liable for freight, unless there be a stipulation to the contrary, and where the ship is on general freight, he is likewise in the ordinary case liable; but there may be circumstances in which the responsibility is transferred to the consignee. "The consignee or indorsee of the bill of lading may be sued, if he have received the goods is not of itself, sufficient to impose charges in respect thereof, although other circumstances concurring with acceptance may; and if there be not only a bill of lading, raise an implied promise from an indorsee to do so, in the absence of an express one." (Smith's Mercantile L., 258, 259. Shee's Abbol., 35 FREIGHT in the contract of affreightment [AFFREIGHTMENT] is the sum which

every the members thereof, their wives, children, relations, or nominees, in sickness, infancy, advanced age, widowhood, or any other natural state or contingency whereof the occurrence is susceptible of calculation by way of average." But in practice such societies generally aim at only three objects,—lst, The making pro-

vision for an allowance to their members during sickness; 2d, For an allowance

in old age; and 3d, For a payment at death.

It would be difficult to trace at what precise time friendly societies in their present form took their rise. The advantages of associations of this kind, however, seems to have been appreciated at a very early period, although they did not attract the attention of the legislature until 1773, and there was no statutory enactment for their regulation prior to the year 1793, when the act was passed which is known by the name of its author, Mr George Rose. The provisions of that statute were extended and improved by others in 1795, 1803, 1809, 1817, and 1819, by which time the number of societies that had been formed in the United Kingdom was very great. But the principles upon which they should be conducted were so little understood, and their management so often confided to persons unqualified for the trust, that the common result was a speedy dissolution. Even in the best regulated, the sickness contributions had to be founded on supposition, as no steps regulated, the suckness contributions had to be founded on supposition, as no steps were taken to ascertain, from actual observation, the average rates adapted to different periods of life, until this was undertaken by the Highland Society. Their report, published in 1824, was the means of arousing public attention to the errors and defects of friendly societies as then constituted; and in 1825 and 1827 further light was thrown upon the subject by the reports of the Select Committees of the House of Commons appointed in those years. These reports prepared the way for the passing of the set 10 Geo. IV. c. 56, which, with the 4 & 5 Wm. IV. c. 40, and 3 & 4 Vict. c 73, embodies the whole of the existing statutory regulations for the guidance of friendly societies. The following are the principal enactments :-

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c. 40, and 3 & 4 Vict. c 73, embodies the whole of the existing statutory regulations for the guidance of friendly societies. The following are the principal enactments:

The rules, before being sanctioned, must specify the purpose of the society, and embody directions for the application of the funds for such purpose, in terms of the provisions of the acts, and in consistency with the privileges conceded by them. They must specify the place of meeting of the society, and contain provisions as to the powers and duties of the members at large, and of the committees and office-bearers; also whether disputes are to be referred to the justices of the peace or to arbiters. (10 Geo. IV. c. 65, § \$3, 10, 27.)

Two transcripts of the rules, signed by three members, and countersigned by the cierk or secretary (accompanied, in the case of an attention or amendment of the rules, with an afficiative of one of the officers of the society, that the statutory provisions have been compiled with), with all special after the same shall be made, altered, or amended, and so from time to time, after every making, after the same shall be made, altered, or amended, and so from time to time, after every making, altering, or amending thereot, shall be submitted in England and Wales to the barrister-at-law for rules are submitted in the control of the rules and shall give a submitted of the control of the purpose; and in Ireland to such barrister as may be named by the Attorney General; who shall ascertain whether such rules, alterations, or amendments are calculated to carry into effect the intention of the parties, and are in conformity to law, and to the said acts, and shall give certificate of the same on each of the said transcripts are calculated to carry into effect the intention of the parties, and are in conformity to law, and to the said rules are repugnant thereof; for all which the said barrister or advocate shall receive no further fees at any

may sue or be sued in his capacity of office-bearer, and may bring or defend actions when sanctioned by a majority of the society. (10 Geo. IV. c. 56, § 21.)

When a member dies, entitled to a sum not exceeding £30, the office-bearer, if assured that he has left no will, and that no administration or confirmation is to be taken out, may apply the sum according to the rules; or, if there are no rules on the subject, may divide it among the persons entitled to succeed to the effects of the deceased without administration or confirmation. (Ib. § 24.)

No stamp-duty is payable in respect of the transactions, receipts, payments, or deeds of societies constituted under the acts. (Ib. § 37.)

Exemption from stamp-duties not to extend to societies in which the sum assured to an individual exceeds £300. No society, by the rules of which a sum exceeding £300 may be assured to an individual, to invest its funds in asvings banks, or with the National Debt Commissioners, except so much as may be received on account of assurances made previous to the act. (3 & 4 Vict. c. 73, § 8, 1, 2.)

except so much as may be received on account of assurances made previous to the act. (3 & 4 Vict. c. 75, §§ 1, 2.)

No society, when once regularly constituted, can be dissolved before the purposes for which it was instituted have been carried into effect, without the consent of five-aixths in value of the members, and of all the individuals entitled to relief. (10 Geo. 1V. c. 56, § 3.)

In the constitution of friendly societies, the chief difficulty will always be the adjustment of the sickness contributions and allowances; as, even supposing the general law, or average rate of sickness to be ascertained, very great care will be required in determining the modifications to which it must be subjected before being applied to particular classes of persons. Hitherto only two attempts have been made on a large scale to ascertain the average rate of sickness. The first is that of the Highland Society, already mentioned, which is founded on numerous returns by Scotch friendly societies. The second is founded on similar returns by English friendly societies made to the Society for the Diffusion of Useful Knowledge, the results of which were published in 1835 by Mr Ansell, in his "Treatise on Friendly Societies." The following shows the mean annual sickness at different ages, deduced from these returns: on Friendly Societies.

ages, deduced from these returns:

Age, 21.

Age, 30.

Age, 50. Daya Henra 9 13 99 19 Scotch societies, English societies,

The returns to the Highland Society did not furnish data for a table of mortality and their calculations proceeded upon an average of the Northampton, Carlisle, and latest Swedish tables. In Mr Ansell's work, however, a table is given, deduced for

latest Swedish tables. In Mr Ansell's work, however, a table is given, deduced for ages 20 to 70, from the experience of the English societies; but the imperfect nature of the materials furnished to him renders it undeserving of much confidence.

Of the modern friendly societies there is probably none deserving of higher reputation than the "Edinburgh School of Arts Friendly Society," instituted in 1828, the tables of which were framed by Mr John Lyon, the gentleman employed to digest the returns to the Highland Society, and revised by the late Mr Fatrick Cockburn, an eminent accountant in Edinburgh; and the following extracts from their tables will furnish a good example of the contributions and allowances adapted to a society composed of respectable working men in a large city. They were constructed by adding 50 per cent. to the rates of sickness exhibited by the tables of the Highland Society (as these were ascertained to be too low), by assuming the rate of mortality of these tables, and by taking the rate of interest at 4 per cent. They give entrants the option of joining sickness schemes up to the ages of 60 or 65, with annuities to commence at these ages respectively; but it may be observed that a very general preference is given by members to the former.

I. Sickness Fund. (Entry Money, 2s. 6d. Males only admissible.) A weekly

Inst a very general preserence is given by memoers to the former.

1. Sickness Fund. (Entry Money, 2s. 6d. Males only admissible.) A weekly allowance of 10s. constitutes one share, and any member may take one, one and a half, or two shares. The full allowance to be paid for 52 weeks of sickness; three-fourths for other 52 weeks; and one-half for the remainder of all temporary or permanent sickness up to the age of 60 or 65, when the annuity, or permanent provision for old age (shown in Scheme II.), is to commence.

ANNUAL CONTRIBUTIONS FOR ONE SHARE

Age next birthday.	То	сел 60	se at	То	ces 65	so at	Age next birthday.	To	60	re at	To	65.	e at	Age next birthday.	To	60.	e at	To	65	se at
19 90 91 92 93 94 95 96 97 98	00000	11 11 12 12 12 12 13	d. 6 81 11 11 4 61 9 01 4 71		s. 12 12 12 13 13 13 14 14 14	d. 4 7 10 14 8 11 3 7 11 4	30 31 39 33 34 35 36 37 38 39 40	40000000000	14 14 14 15 15 16 16 17 17 18	d. 3 7 11 34 84 9 74 1 79 9	0000	15 16 16 17 17 18 18 19 19	d 9 2 7 1 7 1 1 7 1 1 7 1 1 7 1 1 7 1 1 7 1 1 7 1 1 1 7 1	41 42 43 44 46 46 47 48 49 50	£0111111111111111111111111111111111111	19 0 0 1 2 3 4 4 5 6	d. 5 1 9 7 4 1 1 1 9 7	£ 1 1 1 1 1 1 1 1 1 1 1 1	122345678911	d. 9 114 10 9 9 9 9 104 114 1

II. DEFERRED ANNUITY FUND. (Entry Money, 2s. 6d. Females admissible.) An annuity of £8, payable quarterly, commencing at the age of 60 or 65, whether in sickness or in health, constitutes one share; and any member may take one, two, three, or four shares.

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Annual Contributions for One Shark. (Females pay One-Fourth more.)

Age next birthday.	То	60	se at	То	œ 65	se at	Age next birthday.	To	60	use at	To	65	ao at	Age next birthday.	Te	60	se at	To	65	190 A
19 20 21 22 23 24 25 26 27 28	000000	8 9 10 11 11 12 13 14 16	d. 4 3½ 11 6; 2; 10; 8 5; 4 3; 3;	200000000000	45556677788	d. 104 24 64 104 3 7 0 5 104 44	30 31 32 33 34 35 36 37 38 39	£0001111111111111111111111111111111111	17 18 19 1 1 2 4 6 8 10 13 16	101 71 5	000	9 10 10 11 12 13 14 15 16 17	d. 6 1 9 6 3 9 1 1 1 3 5 9 1	41 49 43 44 45 46 47 48 49 50	£19999333344	19 2 6 11 16 2 8 16 5	d. 91 8 71 1 2 0 81 7 10	£1111111111111111111111111111111111111	0 1 3 5 7 10 13 16 19 3	d. 8 101 8 8 101 11 3 10

III. LIFE ASSURANCE FUND. (Entry Money, 2s. 6d. Females admissible.) The sum of £10 payable at death, constitutes one share; and any member may take from one to three shares.

ANNUAL CONTRIBUTIONS FOR ONE SHARE. (Females pay One-Sixth less).

Age next birthday.	То	60	se at •	То	65	ee at	Age next birthday.	To	60	se at	To	сея 65	se at	Age next birthday.	To	60 60	se at	То	65.	
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Summary of the Rules of the Edinburgh School of Arts Friendly Society.

1. No person admitted after the age of 50.
2. Ages of applicants require to be certified by parish certificates, or, if such cannot be procured.

3. Male candidates for admission must apply personally to the committee on the first Monday svening of any month, and pay their entry money. Any applicant who may be rejected by the committee will receive back all his payments, with the exception of 6d. for each fund for which he proposes becoming a member.

4. The benefits of each fund may be secured either by a single payment on admission, or by an annual or monthly contribution per advance, corresponding to the number of shares held, and to the age at entry; and members may also at any time reduce, or entirely redeem, their future sanual or monthly contributions, by payments of not less than £1 to account.

5. Persons entering the sickness fund must take at least one share in the annuity fund.

6. Members not having at first taken the utmost extent of benefits allowed, and wishing afterwards to increase their shares, may do so upon the same conditions as new entrants.

7. Members are entitled to benefit from the sickness and life assurance funds upon the expiry Building special payments are secondations instituted under the act 6 & 7 Wm.

BENEFIT BUILDING SOCIETIES are associations instituted under the act 6 & 7 Wm. IV. c. 32, for the purpose of raising, by periodical subscriptions of not more than $\mathcal{L}1$ per month, shares not exceeding $\mathcal{L}150$, for the purpose of enabling the holder

to receive the value, and therewith erect or purchase a dwelling-house, or other real or leasehold estate, to be secured by mortgage to the society, till the amount of the share and all expenses have been paid, with interest; it being competent for such societies to receive a bonus from any member, in consideration of his receiving

such societies to receive a bonus from any member, in consideration of his receiving his share in advance, and to appoint forms of conveyance for the sale and mortgaging of the property. The regulations as to friendly societies in general, apply to benefit building societies, in so far as they may be applicable to the peculiar purposes of the latter. (Ib. § 4.)

FULLER'S EARTH, a soft, dull, greasy kind of clay, usually of a greenish-brown colour. It is found in various parts of the south of England, particularly in Surrey, near Nuthill and Ryegate. It is used in the fulling of cloth, from its property of absorbing oil and greasy matter. In Surrey, two kinds are distinguished; yellow earth, the best, employed for the finer cloths of Wiltshire and Gloucestershire; and blue earth, principally used in fulling coarser cloths in Yorkshire.

FUNDS, a term used in reference to those government obligations which constitute what is called the funded debt of the United Kingdom. The condition of mankind, in ancient times, made the decision of national contests dependent upon the numbers, courage, and military talents of the contending nations; but the great alteration in the modern state of society, and changes in the art of war, have introduced a different principle; and money is now said to supply the sinews of war, and gold rather than steel is accounted the instrument which leads to victory. In the middle ages, the general state of wealth was insufficient to furnish the tory. In the middle ages, the general state of wealth was insufficient to furnish the means of long-continued hostilities. For those that were undertaken, supplies from the people were obtained to a certain extent, either in the shape of money or of feudal services; loans also were raised, partly compulsory, and sometimes by pledging the crown lands and jewels. But the irregular mode of borrowing in those days bore but little analogy to that which has since obtained under the name of the funding system, and supplied the expense of those extensive and lasting wars which have been waged in later times.

This system is commonly said to have originated in the 15th century in Venice, where money capital first became abundant. It was next adopted by Holland; and was introduced into England shortly after the revolution of 1688. At first the term fund meant the taxes appropriated to the discharge of the principal and interest of the loans; those who held government securities, and sold them to others, selling of course a corresponding claim upon some fund. But afterwards, and when this mode of appropriating taxes was abandoned, the meaning attached to the term was gradually changed; and instead of denoting the revenues upon the security of which the loans were advanced, it has for a long time signified the principal of the loans themselves. The term stock is used in the same sense, and is also applied to the sums which form the capital of the Bank of England, East India Company and other public societies.

India Company, and other public societies.

The fundholder or public oreditor is differently situated from an ordinary cre-The fundholder or public creditor is differently situated from an ordinary creditor. He is viewed not as having lent his money, but as having invested it in the purchase of a perpetual annuity, subject to the condition that it may be redeemed on the terms stipulated at the time of granting it, whenever the state shall think fit. But, although he thus gives up the right of ever demanding repayment of the principal of his debt, he may sell to another person the annuity which he has purchased from the state; and the mode of transferring it, even in small sums, is so conveniently arranged, and the annuities or dividends are, in this country, so regularly naid that it is always considered an elicible property. larly paid, that it is always considered an eligible property.

MANNER OF CREATING LOAMS

At the first introduction of the funding system into this kingdom, the capital of the loan was fixed, and the interest, as in the case of an ordinary debt, was ar-ranged according to the state of the money market; but about the middle of last century the practice was introduced of fixing the rate of interest or annuity, and century the practice was introduced of fixing the rate of interest or annuity, and bargaining with the contractors for a larger or smaller amount of capital stock. Thus, if it were agreed to negotiate the loan in a 3 per cent. stock, while the market rate of interest was 6 per cent., this would be effected by giving for each £100 paid £200 of 3 per cent. stock; while, again, if the market rate were 4½ per cent., this would be effected by assigning £150 of such stock.

All loans are effected under the authority of Parliament; but in practice it is usual for the Chancellor of Exchequer to arrange the terms of the loan with contractors before the act has been obtained, the negotiation being subject to the ratification of the legislature. When a new loan is made, it is thrown open to

competition. "The Chancellor of Exchequer fixes upon the funds in which the loan is to be made. These are often of different kinds, and not unfrequently a long annuity forms part of the amolument. He then gives public intimation that he is ready on a certain day to receive offers and assign the loan to those who are willing to accept of the lowest terms. If a long annuity be a part of the proposed emolument, the other funds to be assigned to the lenders are fixed at a rate somewhat lower than the estimated value for each £100 borrowed, and the bidding is on the long annuity; the loan being granted to those who will accept of the least annuity in addition to the capitals in all the funds, except one, are previously fixed, and the bidding is on that fund; the loan being granted to those who will accept of the least capital. The Chancellor of Exchequer is generally attended at the time appointed by several of the principal bankers in London, who deliver their offers, having previously made up a list of persons who are willing to share with them to a certain extent in case their offer be accepted; and the loan is assigned to the offerer who proposes the lowest terms.

"The loans are always payable by instalments at different periods of the year. But the dividends are payable on the whole from the first usual term of the funds in which the loan is made. Thus, the lender receives dividends during the whole of the first year, although he only advances the money on the days appointed for

in which the loan is made. Thus, the lender receives dividends during the whole of the first year, although he only advances the money on the days appointed for payment of the instalments; or if he advances the whole at first, he is allowed a suitable discount, and he derives part of his profit from these allowances; and, according to the terms of the loan, he is generally possessed of several interests; so much, perhaps, in a 3 per cent. fund, so much in a five per cent. fund, so much in a long annuity, and formerly so much in lottery tickets. After the loan is completed, these interests are assignable separately; but when the loan is in progress, they may be either assigned separately or together. The separate parts in this stage of the business are called sorp, and their united amount is called omnium. In order to obtain a loan, it is necessary that the value of omnium at the time should be above par. This difference, which often amounts to 5 per cent. or upwards, is called the bonus to the lenders. Instances, however, have occurred in which the price of omnium foll below par before the loan was completed. Lenders who do not pay their instalments at the appointed terms forfeit their subscriptions. The Bank of England not unfrequently lends its aid in advancing some of the instalments. the instalments.

"The value of sorip, after any given number of payments have been made thereon, is computed by deducting the amount of the remaining payments from the value of the stock at the market price." (Hamilton on the National Debt, 2d edit. p. 244.)

PROGRESS AND PRESENT STATE OF THE NATIONAL DEST.

The public debt of this country, which was inconsiderable at the Revolution, The public debt of this country, which was inconsiderable at the Revolution, increased in little more than a century to an extent far beyond what was ever known in any other age or nation; indeed, far beyond what any person at its commencement, or even a long time afterwards, believed to be practicable. Down to the accession of George IV., the increase during every reign, except the pacific administration of George I., was greater than during the preceding. The increase during every war was greater than during the preceding. The increase during the latter period of every war was greater than during the early period. The increase by every national exertion has been greater than was held forth when hostilities were commenced. The part paid off during the intervals of peace has borne a small proportion to that contracted in the preceding war. No one can foresee how far this system may be carried, or in what manner it will terminate.

The following table shows the amount of the national debt at various periods

The following table shows the amount of the national debt at various periods since the Revolution:—

```
At the Revolution 1689 £664,963 Peace of Paris 1763 £130,000,000 Peace of Ryswick 1697 ... 21,515,742 Commencement of the War 1701 .16,394,701 Peace of Utrecht 1714 ... 37,681,076 Commencement of the Spanish War 1740 ... 1740 ... 1779 .139,000,000 Commencement of the Spanish War 1740 ... 1748 ... 1783 ... 261,735,069 Peace of Aix-la-Chapelle 1748 .78,383,313 Commencement of Seven Years War 1756 .75,000,000 On January 5, 1841 ... 885,186,325 On January 5, 1841 ... 849,998,073
```

This table includes both the funded and unfunded portions of the debt; the latter consisting generally of Exchequer bills. [EXCHEQUER BILLS] In the years

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1816 and 1841, the constituent parts of the capital of the debt, and the annual charges thereon, were respectively as follow:—

	Ca	pital.	Annua	Charge.
	1816.	1841.	1816.	1841.
S per cent. stock	. 10,740,013 75,725,504	349,530,456 1,615,385	375,900 3,029,090	8,733,566 64,615
Perpetual annuities	E 816,311,930	766,371,725	98,978,990	24.283.940
Terminable annuities. Unfunded debt not provided for	30,080,347	\$3,000,000 21,696,350	1,894,619 1,998,937 984,673	
Total unredeemed debt	£ 885,186,394	840,998,075	32,457,143	29,296,378

The reduction on the capital of the debt from 1816 to 1841, it will be thus observed, is only £37,283,249, which is the excess of the sums redeemed beyond those added in that period. The former was effected, partly by the direct application of surplus revenue, and partly by converting the perpetual annuities into terminable annuities, as afterwards explained. The excess of income over expenditure from 5th January 1816 to 5th January 1837, is stated by Mr Porter (Propress of the Nation, sec. iv. 2. p. 301) to have been £46,086,321; but between 5th January 1837 and 5th January 1841, there has been an annual deficiency of revenue, amounting on the whole to £4,300,760, which reduces the net surplus in the 25 years from 1816 to £41,785,561. The amount redeemed by converting perpetual into terminable annuities has not been published; but it appears, from the statements of the government actuary, that, for some years past, the annual charge on account of the latter has exceeded their equivalent perpetuities by upwards of £2,000,000. The chief additions to the debt, in the period under notice, were created by the parliamentary grant of £20,000,000, for the emanipation of the negro slaves in the colonies;* and by the financial operation in the year 1822 (noticed below), for the reduction of the interest on a portion of the debt,—a measure which had the effect of adding £7,481,393 to the capital.

Greater progress, however, has been made in the reduction of the annual charge, the difference on the gross amounts in 1816 and 1841 respectively being (£32,457,142—29,296,378) £3,160,764; while, if the terminable annuities at both periods be converted into their equivalent perpetuities, the difference will be found to be nearly £4,500,000,† being a diminution of 14 per cent. This has been effected mainly by the reduction of the capital of the debt already explained, and (to the extent of £2,855,845) by the fall of the market rate of interest caused an advance of the colonics. In 1822, the reduction in the market rate of intere

be explained as follow :-

In 1822, the reduction in the market rate of interest caused an advance of the 5 per cent. stock to 6 or 8 per cent. above par, and advantage was taken of this circumstance to induce the holders to exchange each £100 of 5 per cents for £105 of 4 per cents. Only a very small proportion of the holders dissented from the procal, £149,627,825 of 5 per cents being exchanged for £157,109,218 of 4 per cents; and thus while the capital of the debt was increased by £7,481,893, the annual

^{*} The capital created on account of this grant consisted of £5,171,684, 4a.5d. in the 3½ per cents, procured by an arrangement (5 & 6 Wm. IV. c. 45, and 6 & 7 Wm. IV. c. 62) with the Commissioners for the Reduction of the National Debt; and a direct loan, in 1835, of £15,000,000 (3 & 4 Wm. IV. c. 73), the consideration for which was an equivalent amount in 3 per cent. stock, namely. 75 per cent. in the 3 per cent. consols, and 25 per cent. in the 3 per cent. reduced annulm IV. c. 73), the consideration for which was an equivalent amount in 3 per cent. stock, may 7,75 per cent. in the 3 per cent. once, and 25 per cent. in the 3 per cent. reduced anui-s, besides a long annuity of 13s. 7d. per cent. per annum, expiring in 1890, and amounting to ties, besid £101.875.

^{£101,873.} Any other loans necessary since 1815 have been usually created by the issue of Exchequer bills, which have been funded as occasion required.

7 The annual charge in 1816 was £33,467,141; but if instead of the £1,894,619 of terminable annuities included therein, there be substituted their equivalent perpetuities, estimated at £330,000, the amount will be reduced to £31,399,529. Again, the annual charge in 1814 was £39,395,379, and, substituting for the £4,114,091 of terminable amunities included therein, their equivalent perpetuities, estimated at £1,780,000, the amount will be reduced to £35,393,397. The difference between the two, £4,400,179, may be viewed as the extent to which the permanent annual charge on the debt has been reduced since 1816.

charge was reduced by £1,197,022. In 1824, another saving of £350,597 per annum was effected, by reducing to 3½ per cent. the interest payable on £70,105,403 of 4 per cent. annuities. Again, in 1830, a saving to the extent of £765,110 was effected by transferring into a 3½ per cent. stock the 4 per cents created on the reduction of the 5 per cents in 1822; and in 1834 a further saving of £53,116 was effected by transferring the "4 per cents 1826" to a 3½ per cent. stock.

On the occasion of the reduction of 1830, an option was offered to the holders of every £100 of 4 per cents to receive either £100 of 3½ per cents, or, what would produce an equal return, £70 of new 5 per cents, the government engaging not to pay off this 5 per cent. stock, or to reduce the interest upon it, until after the expiration of 45 years from its creation. But the option thus given was embraced to a very small extent, the amount of 5 per cents created having been only £474,374. Such holders of 4 per cents as refused to receive the diminished rate of 3½ per cent. were paid off at par. The amount of stock held by these dissentients, about 2½ millions, was liquidated by means of an issue of Exchequer bills.

EXPLANATION OF THE DIFFERENT FUNDS OR STOCKS.

British Perpetual Annuities.

South Sea Stock and Annuities.—These have all, by successive parliamentary arrangements, been created out of the capital of the celebrated South Sea Company, an account of which will be found under that head. They comprise four descrip-

an account of which will be found under that head. They comprise four descriptions of stock, namely:—

South Sea Stock, 1733, £3,662,784, 8s. 6½d. This is the trading stock of the company, upon which the interest paid by the state is 3 per cent.; but an additional half per cent. is paid to the proprietors from certain fines to which the company are entitled from ships trading within the bounds of their charter, and from the allowances made for the management of this portion of the public debt. Should these fail, however, to produce the full half per cent., government is bound to supply the deficiency.

these fail, however, to produce the full haif per cent., government is bound to supply the deficiency.

3 per cent. Old South Sea Annuities, £3,497,870, 2s. 7d. This was created a 3 per cent. fund in 1757, having previously borne interest at 5, 4, and 3½ per cent. Dividends due April 5, and October 10.

3 per cent. New South Sea Annuities, £2,460,830, 2s. 10d. In the same condition as that last mentioned. Dividends due January 5 and July 5.

3 per cent. South Sea Annuities, 1751, £523,100. This stock originated in a loan which was raised in the year just mentioned, to pay off those who dissented from a reduction of interest which was then made in the old and new annuities. Dividended the January 5 and July 5.

a reduction of interest which was then made in the old and new simulates. Dividends due January 5 and July 5.

3 per cent. Bank Annuities, 1726, £825,251, 19s. This stock, originally £1,000,000, was created by a lottery to pay off certain Exchequer bills. Dividends due January 5 and July 5.

January 5 and July 5.

3 per cent. Consolidated Annusities, commonly called Consols, 1751, £362,542,977,

8s. Old. This stock, originally only £9,137,321, derives its name from having been formed by the consolidation of several stocks which had before been kept separate. It is by far the largest of the public funds, a circumstance which, joined to the proportionally great number of its holders, renders it the most liable to be affected by those circumstances which tend to elevate or depress the price of the stocks: on this account it is preferred by speculators. Dividends due January 5 and Iuly 5. and July 5.

and July 5.

3 per cent. Reduced Annuities, 1757, £125,661,030, 7s. 10d. The name of this stock is derived from the circumstance of its interest having been reduced from a higher rate, 3½ per cent., which it bore prior to 1757. Its price is regulated by that of the preceding; being however generally about ½ per cent. higher or lower (according to the time of year), in consequence of its dividends becoming due at different periods from those on consols. Dividends due April 5 and October 10.

3½ per cent. Consolidated Annuities, 1818, £10,159,721, 17s. 1d. This stock was created partly by the funding of Exchequer Bills, and partly by the conversion of certain 3 per cents—the holders of the latter purchasing the additional half per cent. by a money subscription, then given in aid of the sinking fund. In 1829, it became redeemable at par, upon six months notice being given in the Gazette, and affixed upon the Royal Exchange, by payments of not less than £500,000 at one time. Dividends due April 5 and October 10.

3½ per cent. Reduced Annuities, 1825, £66,259,849, 12s. 9d. This stock was created by the conversion of the "Old Four per cents." It is now also, as well as the preceding, redeemable at par. Dividends due April 5 and October 10.

New 34 per cent. Annuities, 1830, £145,225,865, 13s. 2d. Formed by conversion of the "New Four per cents;" to which, in 1834, was added £10,708,409 of "Four per cents, 1826." It became redeemable after 5th January 1840. Dividends due January 5 and July 5.

New 5 per cent. Annuities, 1830, £428,076, 15s. 4d. This stock originated in the same manner as the New 34 per cents. It is not redeemable until 1875. Dividends

due January 5 and July 5.

These, added to £11,015,100 of debt due to the Bank of England, bearing 3 per cent. interest, make £732,462,458, 7s. 13d., the unredeemed capital of the British Funded Debt, at 5th January 1841. At that date the amount of the redeemed capital standing in the name of the Commissioners for the Reduction of the National Debt, was £1,574,326, 7s. 1d., vested, almost wholly, in 3 per cent. Reduced Anticological and Compale nuities and Consols.

The dividends are payable on the third day after they become due, but if a Sunday intervene, they are not payable until the fourth day. Those on the South Sea Stock and Annuities are payable at the South Sea House; the others at the Bank

of England.

Irish Perpetual Annuities.

These consist of 3 per cent. Irish Consolidated Annuities, £3,272,607, 7s. ld.; 3 per cent. Reduced Annuities, £115,197, 10s. 10d.; 3½ per cent. Debentures and Stock, £14,567,562, 7s. 2d.; Reduced 3½ per cent. Annuities, £926,633, 7s. 3d.; New 5½ per cent. Annuities, £12,390,823, 18s. 10d.; New 5 per cent. Annuities, £5672, 19s. Adding to which, £2,630,769, 4s. 8d. due to the Bank of Ireland, namely, £1,615,384, 12s. 4d. at 4 per cent., and £1,015,384, 12s. 4d. at 5 per cent., makes £33,909,266, 14s. 10d., the amount of the capital of the Irish Funded Debt at 5th January 1841. The dividends on the Irish Stocks are payable at the Bank of Ireland. Ireland

Terminable Annuities.

In the year 1808, the Commissioners for the Reduction of the National Debt In the year 1808, the Commissioners for the Reduction of the National Debt were empowered to grant annuities for the life either of the purchaser or his nominee, upon such an amount of perpetual annuities being transferred to the Commissioners as, when calculated according to a scale varying with the fluctuating prices of the stocks, was considered equivalent to the present value of the annuity. But it is singular, that with the experience which could then have been brought to the correct elucidation of this subject, the tables adopted were incorrect to a degree which entailed a very heavy loss upon the public. In 1827, when the matter was investigated by the government actuary, the loss, through miscalculation in these tables, was proceeding at the rate of about £400,000 a-year. This blunder was pointed out to the finance minister as early as 1819, but no active steps were taken to remedy it until 1828, and even then the rates at which annuities were granted upon the lives of old persons were found to be so unprefitable to the public, that government had again, after a time, to interfere, and to limit the ages upon which government had again, after a time, to interfere, and to limit the ages upon which they could be obtained. They are now granted under authority of the act 10 Geo. IV. c. 24, upon conditions which are explained under the head Annurries; besides which they are, by a later act, 3 Wm. IV. c. 14, granted on a modified scale through the medium of savings banks. [Banks for Savings.] The whole payable in 1841 were as follow :-

Life Annuities, per 48 Geo. III. c. 142, 10 Geo. IV. c. 24, and 3 Wm. IV. c. 14 Other Life Annuities, per various acts Annuities for a limited term of years, per 59 Geo. III. c. 34, 10 Geo. IV. c. 24, and 3 Wm. IV. c. 14

Dead Weight Annuity, payable to the Bank of England, per 4 Geo. IV. c. 22 [DEAD WEIGHT], expires 1807

Long Annuities, or Annuities for a term of years, expiring January 5, 1860, granted chiefly as premiums to the subscribers to loans 1.314.928 585.740 1,294,473

£4.114.021

Deferred Annuities were besides outstanding to the amount of £5,908.

The life annuities are payable at the National Debt Office, Old Jewry; the others at the Bank of England.

PURCHASE AND SALE OF FUNDED STOCK.

In a general point of view, it might be supposed that the price of a certain nominal amount of stock in any particular fund would bear to its price in any other fund the same relation which subsists between the rates of interest in the

^{*} By a late regulation no person can be nominated above the age of 65, unless possessing a bene-ficial interest in the annuity.

two funds; and that, for example, if £100 in a 3 per cent. stock cost £30, the same amount would cost £105 in a 3 per cent. stock, £120 in a 4 per cent. stock, and £150 in a 5 per cent. stock, as each of these investments would yield the same return of interest,—namely, £3, 6s. 8d. per cent. But there are peculiar circumstances which render this rule subject to variations. Thus, the exchangeable value of 3 per cent. stock is always greater than that of funds bearing a higher rate of interest, in consequence of the liability to which the latter are exposed of being sooner dispharged at par, by means of greating other stock bearing a lower rate. sooner discharged at par, by means of creating other stock bearing a lower rate. Again, those funds in which, either from their small amount, or some other cause, there are comparatively few transactions, will not commonly bear so high a price as those in which more frequent operations, and consequently greater fluctuations, effer a more attractive lure to speculation. It is from this cause that the 3 per cent. Bank Annuities of 1726, the entire amount of which is only about £850,000, are generally at least 1 per cent. lower in price than the 3 per cent. consols. In other cases, however, it is difficult to account satisfactorily for the preference shown

by the public for one description of stock over another.

Investments in the funds being made with various objects, the choice of the stock must, in some respects, be regulated by the ulterior views of the purchasers. When made for temporary purposes, stocks bearing the higher rate of interest may commonly be selected without much risk of loss from such a source. The same liability of being redeemed which admits of the purchase being made at the lower rate will indeed equally exist, and affect the price whenever a sale is made; but in the in-

indeed equally exist, and affect the price whenever a sale is made; but in the interval an advantage in point of income will have been secured.

The general causes which affect the price of stocks are changes in the market-rate of interest, or in the political or financial condition of the country. "In ordinary times, the public funds, from the certainty and regularity in the payment of the dividends, and the great facility with which transfers may be made, offer as advantageous an investment as any other which is open to capitalists; and the price of stocks, accordingly, will commonly be so high as not to afford the purchaser more than the current rate of interest for money lent upon good security. The chances of fluctuation, however, will in general prevent the price from rising much beyond this point. On the other hand, it will be apt to be depressed to a lower level, not only by any actual derangement in the public finances, but also by whatever may be supposed to have ever so indirect or remote a tendency to affect the ability of the state to fulfil its pecuniary engagements. Whenever a new loan is raised, inasmuch as the burden of the debt is thereby increased, the price of stock is generally lowered for the moment. Again, it is usually lower in time of is raised, inasmuch as the burden of the debt is thereby increased, the price of stock is generally lowered for the moment. Again, it is usually lower in time of war than in time of peace; and during an unfortunate than during a successful war. It is often affected by the apparent stability of the administration, as dependent upon the issue of the party contests in parliament. Sometimes the price of the funds has been brought down by the imposition of a tax, sometimes by the repeal of one. In the former case, the delicate and apprehensive pulse of the moneymarket may be supposed to have been acted upon, commonly either by a dread of the public impatience under a new burden, or by the view taken of the measure as an indication of increased financial difficulties on the part of the state; in the latter, by a feeling of the security of the fundholder being in some degree diminished, in consequence of the extinction of one of the usual sources from which the dividends, together with the other expenses of the government, have been paid. ished, in consequence of the extinction of one of the usual sources from which the dividends, together with the other expenses of the government, have been paid. But it would be scarcely possible to arrange, under any number of general heads, all 'the skyey influences' that are capable of elevating or depressing this most sensitive barometer, the nature of which is to be agitated by every breeze of popular exhilaration or nervous despondency, by every fit of suspicion or confidence, by every hope and fear, almost by every passion, imagination, and caprice of the human heart. It may be observed, however, that in the fluctuations of the funds, a fall of prices by what we may call a start or a leap, has been a men more frequent phenomenon than an equally sudden rise to any considerable extent. The depression which is at once produced by a panic is generally recovered from only by degrees." (Companion to the Newspaper, No. 40, p. 69.)

The manner of transferring stock is described by Dr Hamilton as follows:—

The manner of transferring stock is described by Dr Hamilton as follows:-

[&]quot;Agreements for the sale of stock are generally made at the Stock Exchange, which is frequented by a set of middlemen called jebbers, whose business is to accommodate buyers and sellers with the exact sums they want. A jobber must be possessed of considerable property in the funds; and he declares a price, suppose \$50 or \$50 in the three per cent consols; that is, he is willing to buy any sum from any person at \$90, or sell him at \$50 in By this means, one who wishes to sell, suppose \$236. 10s, and could hardly find a purchaser for that precise sum without the assistance of a jobber, obtains his purpose, and the smallest sums are purchased and sold with the utmost

fieldity. The jobber's profit is generally a per cent., for which he transacts both a sale and a purchase; and these persons often engage in no other stock speculation, but go away when the business of the day is over, possessed of the exact sum of stock they had in the morning.

"The bargain being agreed on, is carried into execution at the Transfer Office, at the Bank, or at the South Sea House. For this purpose the seller makes out a note in writing, which contains the names and designation of the seller and parchaser, and the sum and description of the stock to be transferred. He delivers this to the proper clerk, and then this up a receipt, a printed form of which, with blanks, is obtained at the office. The clerk, in the sum and description of the stock to be transferred. He delivers the stock in the stock power of the stock in the stock is invested when the books are shut, previous to the payment of the dividend, receives the dividend for the half-year, has the books are shut, previous to the payment of the dividends, receives the dividend for the half-year preceding; and, therefore, a purchase, and the stock previous, from the last term of payment to the day of transfer. The price of stock, therefore, rice gradually through the stock is invested when the books are shut, previous to the payment of the dividends, receives the dividend for the half-year preceding; and, therefore, a purchase, and the stock in the proper office for examination one day before selling. A stockholder acting personally after granting a letter of attorney, revokes it by implication.

"The person in whose name the stock is invested when the books are shut, previous the payment of t

TRANSPER REGULATIONS.

Bank of England. Transiv Days. Transiv Days. Tu. W. Fri. New 5 per Cent. Tu. W. Tri. New 3 per Cent. Tu. W. Tri. 5 per Cent. Concolo. Tu. W. Tri. Bank 6 per Cent. 1736. Tu. Tri. Bank 7 per Cent. 1736. Tu. Tri. Bank 8 tock. Tres. Th. Fr. Bank 8 tock. Tres. Th. Fr. Bank 18 tock. Tres. Th. Fr.	9a. 6d., above it, 12a. The books at the transfer offices are always shut for about six weeks previous to the days of payment, during which period no transfers can be regularly made. The expense of a power of attorney is £1, 1s.
	shot for short of marks merrians to the days
	some for moone are weaks breatons to the days of
Anns. for Terms of Yrs. Mon. W. Fr. /	be regularly made.
Bank Stock Tues. Th. Fr. \	The expense of a power of attorney is £1. is.
b) per Ct. Consols, 1818 Tues. Th. Fr.	6d. for each government stock, and for South
three Cent. Reduced To W Th Re (April o	Sea stock, £1, 11a. 6d.
nes Cont Dadwood To W Th D. 7 and	Tickets for preparing transfers must be de-
	viewes for bishering sugments ment be de-
rong vimienes atom as to per /	posited in the respective offices before one o'clock,
Anns. for Terms of Yrs. Tues. Th.	otherwise a fee of 2s. 6d. is demanded for each :
South Sea House.	on the payment of this fee, however, transfers
South Sea Stock Mond. W. Fri.) Jan. 5	may be made on any day of the week up to 30'clock
per Ct. New S. S. An. Tues. Th. Sat. > and	at the Bank, and half-past 2 o'clock at the South
per Cent. 1751 Tues. Th. Set. July 5.	Sea House, provided the books are not shut
April 8	for the dividend. Transfers forwarded in the
per Ct. Old S. S. Anns. Mon. W. Pr. } and	usual manner, without fee, are made void if not
J Oct. 10.	executed by half-past 2 o'clock. These regu-
The rate of brokerage is 2s. &d. on the £100	lations apply both to the Bank and South Sea
ipon the stock transferred. There is no stamp-	Hones.

The following tables will serve to facilitate computations respecting the value of the different stocks,—the first by showing the portion of accruing interest or dividend necessary to be deducted from their price as usually quoted in the market,

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before comparing them with each other,—the second by showing their proportional amount in reference to the same yearly return of interest. The use of these tables has been extended, it will be observed, to other descriptions of stock besides those of the government.

Table showing the Amount of Dividend which has accrued upon various Stocks on the first Day of each Month.

	Dividend	due Jan. 5	t July 5.	Dividende	due April 5	& Oct. 10.
	Consols 3 per cents.	New 31 per cent.	E. L. Stock. 10j per cent.		Reduced 3) per centa.	B, of E.Stock 7 per cent.
January February March April May June July August September October November	£ L d. 1 9 4 0 4 6 0 9 1 0 14 3 0 19 3 1 4 4 1 9 4 0 4 5 0 9 5 0 14 4 0 19 5	£ s. d. 1 14 3 0 5 3 0 10 8 1 2 5 1 8 5 1 14 5 0 16 9 1 1 9 5 1 1 8 5 1 1 8 5 1 1 8 5	£ & d. 8 2 9 0 15 8 1 11 11 2 9 11 3 7 4 4 5 3 5 2 10 8 1 13 1 2 10 3 3 7 7 11 4 5 0	£ L d. 0 14 1 0 19 4 1 4 1 1 9 4 2 0 9 1 0 13 10 0 18 10 1 3 9 1 8 7 0 8 10	£ a. d. 0 16 5 1 2 7 1 8 1 1 14 3 0 4 10 0 10 7 0 16 2 1 1 11 1 1 7 9 1 13 4 4 0 10 3	£ a. d. 1 19 10 2 5 2 2 16 2 5 3 8 6 8 8 1 0 6

Table showing the Prices which Stocks, yielding different Rates of Dividend, should respectively bear, in order to produce the same Return of Interest; also the corresponding Number of Years' Purchase for Perpetual Annuities.

Years' Purchase.	Int			3 per cent.	ði per cent.	4 per cent.	4j per cent.	5 per cent.	5) per cent.	6 per cent.	6½ per cent.		71 per cent.	8 per cent.	10i p
331	£	i	d.	100	1164	1334	150	1668	1831	200	2163	2331	250	2668	350
33	3	ŏ	7	90	iis	132	1484	165	181	198	214	231	9474	264	3461
321	š	ĭ	6	971	1134	130	1461	1624	1784	195	2111	2274	9434	260	3414
39	3	ĝ	6	96	119	128	144	160	176	192	208		240	256	336
314	ă	3	ĕ	941	1101	126	1414	1571	1731	189	2043	2204	2361	252	3304
31	3	ă	ě	98	1084	124	1394	155	1704	186	9011	217	2321	248	3951
301	3	5	7	911	1062	122	1371	1521	1671	183	1981	2134	2284	244	3204
30	3	6	8	90	105	190	135	150	165	180	196	210	225	240	315
29}	3	7	10	881	1034	118	1324	1473	1621	177	1914	2061	2211	236	3094
29	3	ġ	0	87	101	116	130	145	159	174	1884		217	233	304
281		10	3	851	994	114	1284	142	1564	171	1851	1991	2134	228	2901
28		11	5	84	98	112	196	140	154	168	182	196	210	, 224	294
278		12	9	824	964	110	1234	137	1514	165	1784	1921	2061	220	268
27		14	1	81	94	108	1214	135	148	162	175	189	2023	216	283
263		15	6	791	921	106	1194	1323	1459	159	1744	1854	1964	212	2781
26.		16	11	78	91	104	117	130	143	156	169	188	195	208	273
25)	8 1	18	5	761	894	102	1148	1271	140	153	1654	1781	1913	201	26,
25	4	Ō	0	75	874	100	1124	125	1371	150	1624	175	187	200	2631
24)	4	1	7	734	854	98	1104	1221	1344	147	1501	1714	1834	196	2571
24	4	3	4	78	84	96	108	120	132	144	156	168	180	199	252
231	4	5	.!	701	823	94	1064	1174	129	141	1524	1644	1764	188	2463
28	4		11	69	801	98	103	115	1261	138	1491	161	1724	184	241
353			11	671	781	90	1014	112	1234	135	1464	1871	1684	180	2364
22			11	66	77,	88	99	110	121	132	143	154	165	176	231
213		3	0	641	754	86	961	1071	1184	129	1391	1801	1614	179	2254
21		5	3	63	731	84	941	105 1024	1154	126	1361	147	157	168	2201
201		7	7	611	714 70	82 80	88 g	1023	1124	123 120	1331 130	1431	1534 150	164	2151
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18	5 5 1	5		57	63	76	81	90	104}	108		133	1423	152	1991
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12		ĕ	8	36	49	48	54 54	80	96	72	78	84	90	96	126
30		ŏ	8	30	35	40	45	50	85	60	65	20	75	80	105

The highest price of 3 per cent. stock was in 1737, when it reached 107, the lowest in September 1797, when, owing to the mutiny in the fleet, the failure of an attempt to negotiate with the French Republic, and other circumstances, it fell to 47]. Since 1820, it has been rarely above 93 or below 75.

PLANS FOR THE REDUCTION OF THE PUBLIC DEBT, &c.

1. A scheme for the gradual extinction of the National Debt, by the establishment of a sinking fund, was projected, but only partially applied, by Sir Robert Walpole in 1716 (3 Geo. I. c. 27). It served, however, in some respects, as the model of the plan of the celebrated sinking fund, suggested by Dr Price, and brought forward by Mr Pitt in March 1786 (26 Geo. III. c. 31), according to which it was proposed to raise and apply (through the medium of certain commissioners) one million sterling per annum, regularly and progressively to the purchase of stock, the interest accruing thereon being applied in like manner, so that the whole would operate in a progressive accelerated ratio at compound interest. Other sums were rendered accessory to the scheme, and at the expiry of 28 years it was calculated that the fund would include a yearly income of four millions, a part of which might then be applied towards the relief of the public. Had this sinking fund been always confined to the legitimate and first proposed, there could not have been which might then be applied towards the relief of the public. Had this sinking fund been always confined to the legitimate end first proposed, there could not have been any doubt with regard to its benefits. But its operation was continued and enlarged after the commencement of the war of 1793, during periods when no surplus revenue existed, and when the sums devoted to it had to be borrowed for the purpose at a high rate of interest. In this way every addition to the sinking fund was cancelled by a corresponding addition to the debt, and the burden of an expensive establishment of officers and clerks was maintained for no beneficial purpose imaginable. This, however, was the least part of the evil. It is well known that the price of the public stocks has a tendency to fall at the period of every new creation of debt, and that the degree of such fall is influenced by the amount of new stock debt, and that the degree of such fall is influenced by the amount of new stock which it is desired to create; while at intervening periods the tendency is of an opposite character, so that the redemption of any portion of debt will not be effected on terms so low as the minister has accepted at the period of its creation. "The average rate," says Mr Porter, "at which 3 per cent. stock was created between 1793 and 1801, was £57, 7s. 6d. of money for £100 stock, and the average market-price during that period was £61, 17s. 6d. for £100 stock. The loss to the public upon the additional sum borrowed, in order that it might be redeemed during that period, which was £49,655,531, amounted to 4½ per cent., or £2,234,500. Between 1803 and the termination of the war, the average price at which loans were contracted was £60, 7s. 6d. per £100 stock, and the average market price during that time was £62, 17s. 6d. per £100. The loss was therefore 2½ per cent. upon the sum redeemed during that time, £176,173,240, or £4,404,331, making together an amount of £6,638,331 absolutely lost to the public by these operations. This amount, reckoned at the average price of the various loans, is equivalent to a capital of more than eleven millions of 3 per cent. stock, with which the country is now additionally burdened through the measure of borrowing in a depressed market more money than was wanted, in order to its being repaid when the market for public securities was certain to be higher." (Progress of the Nation, sec. 4, c. 2, p. 292.)

c. 2, p. 292.)

The fallacy of borrowing larger sums than were wanted, and paying in consequence more dearly for the loan of what was actually required, in order to accumulate the surplus into a fund for buying up the debt at a higher price than that at which it was contracted, appears now sufficiently obvious. The Sinking Fund at which it was contracted, appears now sufficiently obvious. The Sinking Fund Scheme, however, was presented in such a flattering point of view, that it long deluded the public, and the prospect which it enabled the minister to hold out of the speedy redemption of the debt, had the effect of reconciling the people to the imposition of a higher amount of taxes than they would otherwise have borne. Its absurdity was first satisfactorily exposed in 1812 by Dr Hamilton, who proved that "the excess of revenue above expenditure is the only real sinking fund by which public debt can be discharged. The increase of the revenue, and the diminution of expense, are the only means by which this sinking fund can be enlarged, and its operations rendered more effectual: and all schemes for discharging the national debt. by sinking funds operating by compound interest, or in any other manner.

debt, by sinking funds operating by compound interest, or in any other manner, unless so far as they are founded upon this principle, are illusory."

Dr Hamilton's exposition was not immediately successful; for although, on the return of peace in 1815, it was found impossible, exhausted as the nation then was by the stupendous efforts it had made during the war, to continue the collection of the taxes required for maintaining the integrity of the sinking fund, yet for some years a semblance of this was kept up by means of various expedients, and it was not until the passing of the act 10 Geo. IV.c. 27, that the system was entirely abandoned. By that act it was provided, that, from the 5th of July 1829, there shall be issued out of the consolidated fund only such annual sum as shall appear to be the actual surplus revenue of the United Kingdom, to be applied towards the reduction of the national debt, by the commissioners appointed for that purpose; namely, the Speaker of the House of Commons, the Chancellor of Exchequer, the Master of the Rolls, the Accountant-general of the Court of Chancer, and the Governor and Deputy-governor of the Bank of England, for the time being; and that the Lords of the Treasury shall, every quarter, make up accounts of the annual revenue for the four preceding quarters, and one-fourth of the annual surplus to be issued to the said commissioners, who are to publish, in the London Gasette, the sum which will be so applicable in the ensuing quarter. It was also provided that all stock and annuities standing in their names on 5th July 1829 should be cancelled, and the dividends cease to be paid; and that in future all stock purchased by them should be cancelled from the day of transfer.

2. The conversion of the perpetual annuities payable on the capital of the funded debt into annuities payable only for a limited term of years, already explained, operates indirectly as a sinking fund; and so long as it proceeds upon equitable principles, and as the increased annual charge which it occasions is defrayed from a coma fide revenue, and is not carried so far as to interfere with the onward progress of the country through excessive taxation, it appears to be liable to little objection.

of the country through excessive taxation, it appears to be liable to little objection. A considerable relief may be expected from this mode of redemption in the course of the next twenty years, particularly after 1860, when the long annuities expire.

It is objected by some that the principle of this system is subversive of the spirit

of accumulation, by encouraging individuals to consume their whole property during their lifetime, and as such, improper for the adoption of government, whose object ought rather to be to diffuse a spirit of forethought, and induce people to live for others as well as themselves. But the terms upon which annuities are now granted by government are not such as to give an increased stimulus to this method of investment. Annuities are, and have always been, granted by respectable insurance companies, and in every large community there must be numerous persons to whom the conversion of their capital into an annuity is a matter less of

persons to whom the conversion of their capital into an annuity is a matter less of choice than of necessity.

3. Loans during war, it is now said, should be funded in stock bearing a rate of interest equivalent to the market-rate when they were contracted for, rather than in stock bearing a low rate of interest with a corresponding increase of capital, in order that advantage may be taken of the fall of interest at the return of peace. This opinion was advocated by Dr Price and Dr Hamilton; and since we experienced the beneficial effects of the late reductions of interest, it has been again brought forward by the Edinburgh Review (No. xciii., Jan. 1828), by Mr M'culloch in his "Statistics of the British Empire" and other writings, and by Mr Porter in his "Progress of the Nation." In the last-mentioned work (sec. 4, c. 2, p. 294) it is shown that if at the expense of a small present sacrifice of \(\frac{1}{2}\) per cent. interest, the loans during the last wars had been contracted in 5 per cent annuities, and if government had so far taken advantage of the subsequent lowering of the rate of interest as to procure their conversion into annuities of \(\frac{3}{2}\) per cent., the unredeemed debt at the present time would, in all probability, not have exceeded six hundred millions, while the annual charge upon the same would have been twenty-one millions. one millions.

Many of the loans during the last war were raised in a very improvident manner, and there can be little doubt that had the object above contended for been kept more steadily in view by the government, our present burdens would have been less; but whether to the extent supposed by Mr Porter, it is not now necessary to inquire. It would appear, however, that the comparative eligibility of funding in a stock bearing a high or low rate of interest must depend in a considerable degree on their prices in the market. "At all times," says Mr Ricardo, "the 5 per cents bear a very low relative price to the 3 per cents. Here, then, is one disadvantage to be put against another, and it must depend upon the degree in which the prices of the 3 per cents and 5 per cents differ, whether it be more desirable to raise the loan in the one or in the other. We have little doubt, that during many periods of the war there would have been a decided disadvantage in making the loan in 5 per cent. stock in preference to 3 per cent. stock. The market in 5 per cent. stock, too, is limited; a sale cannot be forced in twithout causing a considerable fall,—a circumstance known to the contractors, and against which they would naturally take some security in the price which they bid for a large loan if in that stock." (Ency. Brit., art. Funding System, vol. x. p. 253.) ner, and there can be little doubt that had the object above contended for been

The question as to the best method of funding, therefore, is one, the solution of which must depend in a great measure on the state of circumstances at the time a loan becomes necessary. Meanwhile, it is satisfactory to reflect that the public mind is now too much enlightened on the subject of finance to permit any further imposition with respect to schemes that can be brought to the test of arithmetical calculation; and that although there is but little prospect of any important reduction in the absolute amount of our public debt, yet that its relative burden will become gradually but effectually lightened through the advancing wealth of the country. [Revenue and Expenditures.]

FURLONG, an English measure of length, equal 660 feet, or one-eighth of a mile

mile.

FURS, or PELTRIES. The term peltry is applied by traders to the raw skin; and fur to the skin after the inner side is converted into a kind of leather. The use of furs originated in those regions of the N. of Europe and Asia where they most abound, and where the severity of the climate renders that species of clothing necessary. They were unknown to the ancient Greeks and Romans, and were probably introduced into civilized Europe by the northern conquerors. In the 12th, 13th, and 14th centuries, furs, especially those of the sable and ermine, formed part of the fashionable magnificence of courts. At that time they were chiefly procured from the north of Asia by the traders of Italy, by whom they were distributed throughout France, England, and other countries. Since the discovery and settlement of Canada, however, they have been mostly obtained from the northern parts of America; and there is not perhaps a single article of commerce which has called America; and there is not perhaps a single article of commerce which has called

America; and there is not perhaps a single article of commerce which has called forth a more daring and adventurous spirit, or given rise to a more courageous endurance of dangers and privations, than have been manifested throughout the prosecution of the trade in those bleak and savage regions.

The fur-trade was brought into repute by the French soon after their settlement in Canada in 1608, and their success encouraged the formation of the English Hudson's Bay Company, which was chartered by Charles II. in 1670, with the exclusive privilege of trading with the Indians in the vast territories adjoining the inlet from which the corporation takes its name. But their charter never having been confirmed by Parliament, hunting in those regions was still considered to be open to all British subjects, and not a few engaged in it. This irregular trade was suspended after the expulsion of the French from Canada in 1759, but it soon afterwards revived and increased. In 1766, private adventurers began to traffic from was suspended after the expulsion of the French from Canada in 1759, but it soon afterwards revived and increased. In 1766, private adventurers began to traffic from Michillimakinac, whose success incited others to follow their example; and independent traders gradually spread over every part of the country, until 1787, when these scattered parties were united into one great body, under the name of the "North-West Company." The rivalry of this association had the effect of inspiriting and extending the trade, but it was carried on by them in many respects beyond legitimate limits, and often accompanied by open violence and bloodshed, in which both Europeans and natives were alike sufferers. Never indeed was a more furious contest waged between two mercantile hodies than between the North-West and contest waged between two mercantile bodies than between the North-West and Hudson's Bay Companies. At length, in 1821, the two concerns were united, under the firm of the "Hudson's Bay Fur Company," with much advantage to the peace of the fur countries, and perhaps to the permanent interests of the trade. The skins collected by this Company are all shipped to London, mostly from their factories of York Fort and Moose Fort in Hudson's Bay; others from Fort Vancouver, on the Columbia, on the N. W. coast, and from Montreal. This last, which was the principal seat of the North-West Company, has, since the union,

which was the principal seat of the North-West Company, has, since the union, sunk into a subordinate station.

On the part of the United States, the fur-trade is chiefly prosecuted by the "North American Fur Company," whose principal establishment is at Michillimakinac, where it receives akins from the post depending on that station, and from those on the Mississippi, Missouri, and Yellowstone rivers, and the great range of country extending thence to the Rocky Mountains. This Company penetrates into the bosom of these distant regions by means of steam-beats. Of other associations in the United States, the most celebrated are Ashley's Company from St Louis, and Captain Bonneville's, formed at New York in 1831; which last has pushed its enterprises into tracts between the Rocky Mountains and the coasts of Monterrey and Upper California. Indeed the whole of the districts from the Mississippi to the Pacific, and from the Arctic Sea to the Gulf of Mexico, are now traversed in every direction by the hunter. Almost all the American furs which do not belong to the Hudson's Bay Company find their way to New York, where they are either distributed for home consumption or exported chiefly to London.

distributed for home consumption or exported chiefly to London.

The fur-trade is also extensively pursued by the Russians in the N. of Asia and the N. W. coast of America. Their chief association is the Russian American Company of Moscow; and the principal markets for their furs are the fairs of Kiachta, Novgorod, and Leipsic.

Kiachta, Novgorod, and Leipsic.

Furs may be divided into two distinct classes; those employed for clothing or ornamental purposes, and those used in felting or hat-making. Of the former, the principal are the gray, silver, and black fox, the ermine, sable, chinchilla, fitchet, bear, martin, mink, lynx, and wolf; of the latter, the beaver, nutrin, otter, hare, rabbit, and raccon; but several of the skins used for felting purposes are manufactured for dress. Furs, and especially those used for felting, are further distinguished into expensed and expensed skins; the former being those which are guished into essenced and unseasoned skins; the former being those which are taken off the animal in winter when the fur is at its full growth, and in the highest state of perfection as to fineness; the latter, those obtained in spring, summer, and autumn, when it is short, coarse, and hairy, and generally not worth more than a third of the value of that found on the best seasoned skins.

The more valuable and scarce furs are chiefly procured in Asiatic Russia. The more valuable and scarce rurs are chemy produced in Asiatic Russia. The precious ermine" and sable, both of the genus mustela (weasel), are obtained of the best quality only in the cold regions of that country and the N. of Europe. The snowy whiteness of the former, and the rich dark shades of the latter, with the great depth, and the peculiar, almost flowing softness of their skins and fur, have combined to give them a preference in all ages and countries, and they still maintain the same relative estimate in regard to other furs, as when they marked the rank of the crusader, and were emblazoned in heraldry. The martin resembles the sable; the best are from Kamtschatka and N. Asia, but in every pack of American skins, some are to be found of a beautiful shade, and a deep rich olive colour. Next to these in value are the sea-otter, the mink, and the fiery fox. The sea-otter, procured in Behring's Island, Kamtschatka, and opposite coasts of America, is an exceedingly fine, soft, close fur, jet black in winter, with a silken gloss; the fur of the young animal being, however, of a beautiful brown colour. gloss; the fur of the young animal being, however, of a beautiful brown colour. The sea-otter is confined to the N. W. coast of America, and the number is now so much reduced as to render the chase an object of little consequence. The land-otter abounds on the borders of all the interior lakes of that country; but its skin, chiefly used for collars and linings, is comparatively of small value. The mink is a diminutive species of otter. The fiery fox, the bright red of Asia, more brilliantly coloured and finer than any other of the genus, is highly esteemed, and is the standard of value on the north-eastern coast of that quarter of the world. Of the American fox there are many varieties, as the black, red, gray, white, cross, silver, and dun coloured. The silver fox is a rare animal, a native of the woody disand dun coloured. The silver fox is a rare animal, a native of the woody district below the falls of the Columbia river. Bear skins of various kinds and colours are procured in N. America, and are much used in the northern countries of Europe both for warmth and ornament, particularly on the outside of carriages. The hide of the wolf is considered peculiarly fitted for knapsacks and similar pur-

The heaver's fur is much employed in Germany.

The beaver's fur is an article of great importance, owing to its abundance (though this is now much less than formerly) and the large and sure demand for it in the hat manufacture. It appears to be indigenous in all the northern parts of America, though in the settled countries and in even those open to private hunters, it is now provided. it is now nearly exterminated. The skins are divided into parchment, or those of the old animals, and *cub*, or those of the young ones. The latter are the finest, but from their smaller size are not of equal value with the others, and they have become comparatively rare, as the capture of the young animals is now prohibited by the Company. The musquash, a species of diminutive beaver, is found principally in the vicinity of Hudson's Bay, and the vast number taken renders its skin an article of importance; the fur is used in the manufacture of inferior hats. Nuan article of importance; the fur's used in the manufacture of inferior hats. Nutria skins have become of considerable importance only within the last twenty years; they are imported from S. America, principally from Le Plata. Of the other foreign furs it is unnecessary to speak, as a description of all those of much interest will be found under their respective heads. The only British ones that need be noticed are those of the rabbit and the hare, which are both extensively used for felting; the hair of the silver-tipped rabbit of Lincolnshire, however, is highly esteemed for dress,—a purpose for which it is exported both to Russia and China. Furs are not only used and valued in those countries where they are needed for defence against the severity of the seasons, but also among the inhabitants of milder climates, who, being of Tartar or Sclavonian descent, are said to inherit an attachment to that species of clothing. Such are the inhabitants of Poland, Southern

Russia, China, Persia, Turkey, and many of the nations of the middle and western parts of Europe. In Syria, Egypt, Bucharia, and Independent Tartary, there is also a great consumption where there exists no physical necessity.

The principal emporium of the fur-trade is London, where the vessels of the Hudson's Bay Company arrive about the end of September; and the public sales afterwards held by them are attended by many foreign merchants, whose purchases are chiefly sent to the great fairs of Leipsic, whence they are distributed through various parts of the Continent. The following is an account of the furs exposed for sale by the Company in December of the three years 1835, 1836, and 1837:—

	1835.	1836.	1837.		1835.	1836.	1837.
Skins of	l ———i			Skins of			
Beaver	78,908	46,063	82,927	Fisher	2,479	1,327	6,115
Martin	61,005	52.749	156,168	Lynx	6,990	3,762	31,887
Otter	15,487	8,432	15,934	Mink	17,809	12,228	27,750
Fox, Silver and			_	Wolf	3,729	307	7,031
Cross	910	471	2,147	Wolverene	1,963	143	2,166
Other Foxes	8,704	1,994	22,861	Badger	698	201	754
Musquash	1,111,646	160,996	838,549	8wan	4,703	12	6,600
Bear	4,127	1,715	7,563	Raccon	522	99	585

The value of furs, especially of those which are articles of luxury and fashion, varies in an extraordinary manner, in consequence of the great inequality of the supply and the demand; and the fluctuations in price in the course of a single year often exceed 300 per cent. The following has been obligingly furnished to the publishers of this work by the Hudson's Bay Company, as the average prices of each description in the sales of 1836, which are considered as affording a good general idea of the course of the trade:—

£sd	£idi	£ad
Beaver, parchment, per	Fox, Silver	
skin1 19 6	Cross	0 0
Cub	Red 0 10 0 Mink	8 6
Coat, per lb 0 12 0	White 9 0 Wolf	6 4
	Kit 3 0 Wolverene	
Otter, Bes	Musquash	6 6
Tand 1 9 6	Denn A 10 d Decom	

The following is an account of the chief imports of fur into the United Kingdom

	British America.	United States.	La Piata States.	North of Europe.
BearNo.	4,818 87,897	4,869 10,876		196 96
Martin	74.046	96,721		102,451 127,317 3,639
Musquash	594,994	82,211 211,156	200	6.554
Nutria Otter	14,898	371	214,394	2.0 865

FUSTIAN, a coarse thick cotton stuff, generally tweeled, and of a dark colour. The most common kind is named pillow; but the fabrics called barragan, corduroy, velveret, velveteen, beaverteeu, and thickset, are also fustians. These cloths are made in Lancashire and Yorkshire.

made in Lancashire and Yorkshire.

FUSTIC (Fr. Bois Juune. Ger. Gelbhols. Sp. Pale del Brasilemerillo), a dyewood, the produce of a large tree, a species of mulberry (Morus tinctoria), a native of tropical America and the West Indies; the best being that of Cuba. It is of a sulphur colour with orange veins, hard and strong, and is imported in the form of logs or large blocks. The yellow dye which it affords, though extremely durable when in combination with an aluminous base, yet, being dull and muddy, is chiefly employed in compound colours. About 10,000 tons of the timber are annually imported, of which upwards of four-fifths are entered for home consumition. Nearly one-half of the importations are from Colombia; the remainder chiefly from Jamaica, Cuba, and the United States.

Zante Fustic. or Fustet, vulgarly called young fustic, in distinction from the

maica, Cuba, and the United States.

Zante Fustic, or Fustet, vulgarly called young fustic, in distinction from the preceding, which is sometimes termed old fustic, is the produce of the Venetian sumach (Rhus cotinus), a shrub growing principally in Italy, the S. of France, and Greece. Both the root and the stem afford a fugitive yellow colour; but it is seldom used alone, being chiefly employed as an accessory to heighten cochineal and other dyes, and to give them a yellowish tinge. This wood is imported in small quantities from Patras in the Morea, the Ionian Islands, and other places.

G.

GALANGAL (Fr. Galanga. Ger. Galgant), a brown tuberose root, with a faint aromatic smell and pungent taste, like a mixture of pepper and ginger. There are two kinds, galangal major (Alpinia Galanga) and galangal minor, of which the latter is the strongest in all its qualities, and by far the more valuable. It may be distinguished by its colour on the outside being browner, and in the inside reddish, whilst the greater root is brownish on the outside, of a dirty white within, and covered with rings about one-fourth of an inch distant. They are produced in China, Sumatra, and Java, and used in medicine.

GALBANUM (Arab. Barsud. Fr. Galbanum. Ger. Mutterhars. Pers. Beersud), a medicinal gum-resin, produced by a perennial plant (Bubon Galbanum) indigenous to Africa. It has a peculiar strong odour, not unlike that of turponine, and a nauseous bitter taste. Sp. gr. 1-212. The best occurs in pale-coloured pieces about the size of a hazel-nut, composed of clear white tears. A more com-

pieces about the size of a hazel-nut, composed of clear white tears. A more common kind is in agglutinated masses, consisting of yellowish or reddish and clear white tears, mixed with seeds and leaves. When blackish, of a weak smell, soft, and mixed with sand and other impurities, it is bad. It is exported from Syria, the Levant, and the Cape of Good Hope.

the Levant, and the Cape of Good Hope.

GALENA (Fr. Plond sulfuré. Ger. Bleiglans), or lead-glance, is a native sulphuret of lead, found at Leadhills in Lanarkshire, and other places. It is the richest ore of that metal, and nearly all the lead of commerce is obtained from galena. It usually occurs in heavy, shining, black, or blueish lead-coloured cubical masses. It is used in the form of powder, called Alguifous, for glazing pottery.

GALLEON, a name formerly given to the vessels of war used by the Spaniards and Portuguese, and in later times to those large ships in which the former transported treasure from their American colonies.

GALLEY, a long, narrow, flat-built vessel, with one deck, propelled by sails and oars, which was much used, especially by the Italians, until of late years, when it was superseded by the steam-boat. It carried two masts with lateen sails, and, drawing but little water, was well adapted for coast navigation; while, by means of its oars, it had an advantage over sailing vessels in the dead calms so frequent in the Mediterranean.

GALLIC ACID, discovered by Scheele in 1786, exists in most astringent vegetables, and especially in gall-nuts. Its constituents are carbon, oxygen, and hydrogen. It is a solid, in taste slightly sour and astringent, inodorous, crystallizing in white silky needles. In boiling water it is freely soluble, but it requires 100 parts of cold water for solution; it dissolves also in ether and alcohol. In the form of tincture of galls it is much employed as a chemical reagent. With

the form of tincture of galls it is much employed as a chemical reagent.

the form of tincture of galls it is much employed as a enemical reagent. When bases it combines to form salts, called gallates.

GALLIOT, a name given to a Dutch vessel, of which the bow and stern are similar, round, and bluff, and the bottom flat, so as to draw little water; and having on each side, suspended by an iron bolt, a flat piece of wood, called a lee-board, which, when required, is let down on the lee-side of the vessel, to prevent her drifting so fast to leeward as she would otherwise do. The galliot has two masts; the foremast, the tallest, is rigged as a sloop; while the aftermast carries a small sail termed the mizzen. This vessel is chiefly adapted for the shallows off the coast of Holland. of Holland.

GALLON, the unit of the imperial measures of capacity, contains 10 lbs. avoir-dupois, or 277 274 cubic inches of distilled water. It contains almost exactly one-fifth more than the former English wine gallon, or 5 Imp. gallons = 6 wine gallons nearly. Also 60 Imp. gallons = 59 old ale gallons nearly. [MEASURES AND WINDOWS 1]

mearly. Also out imp. gations = os out eac games.

Weights.]

GALLOON, a narrow thick ferret or lace, commonly made of mohair or silk; but sometimes of wool, thread, gold, or silver. It is used as edging, and is largely employed in binding hats. The finer kind is manufactured at Coventry, and the coarser at Spitalfields.

GALLS (Fr. Nois de Galls. Ger. Gallapfel. It. Galls. Sp. Agallas), a kind of

nuts or vegetable wens, from one-fourth of an inch to an inch in diameter, produced on several species of oak trees, by the perforation of insects for the deposition of their eggs. This nest increases in size, together with the larva enclosed in it, which, on arriving at maturity, eats its way out, and hence gall-nuts are generally found with a hole in them. They are in perfection when they have acquired their full

size and weight, but before the young insect has pierced them; after which, they become of a brighter colour, and lose part of their weight. The nuts first gathered are called blue and green galls; those later are very inferior in value, and are called white galls. They are sometimes smooth, sometimes covered with spines, of an ash gray, or greenish, or blackish-brown colour. Those which are heavy and not perforated are preferred; but in commerce they are almost invariably found in a pierced state. They are produced abundantly throughout Asia Minor from a small species of oak (Querous infectoria), and the best are those of Aleppo or Mosul, which are about the size of a nutmeg, and mostly of a blueish or grayish colour, hard, heavy, compact, with numerous small tubercles on their surface. The European variety is pale white or brownish, smooth, light, easily broken, and much weaker than the Eastern. Galls abound in astringent matter or tannin, and are largely used in dyeing, inkmaking, and in medicine. They are imported in bags weighing 1 cwt., and in chests weighing from 2 to 3 cwt. each.

GAMBOGE, on CAMBOGE (Fr. Gomme Gutte. Ger. Gummigutt), a gumresin, the product of a tree in Siam, the name of which is doubtful. It is inodorous and nearly insipid to the taste. The best, the pipe-gamboge, is in rolls of a dull orange colour, having a conchoidal fracture, of a deep orange yellow, and a waxy rather than resinous lustre. It also occurs in cakes, fracture uneven, slightly porous, colour less bright, and lustre more resinous. The larger cakes, and such as are dark coloured, should be rejected. Genuine gamboge comes from Siam, and is imported to this country generally by the way of Singapore or China. It is used as a pigment in water-colours, and as an ingredient in some varnishes. It also a rough and violent cathartic.

china. It is also a rough and violent cathartic.

GARBLE, the dross and refuse of spices and drugs.

GARBLING, picking out the worst of any commodity.

GARLIC, a perennial plant (Allium satioum), a native of Sicily, and cultivated in this country for its root, which consists of pungent acrimonious bulbs, of a strong and offensive smell. It is employed as a condiment, and is an ingredient in curries:

it is also used in medicine.

GARNET (from Fr. Grenat, of the colour of pomegranate seeds) is a precious stone, of which there are different kinds. The most valuable is the Almandine. stone, of which there are different kinds. The most valuable is the Almandine. previous garnet, or carbuncle, a beautiful crystallized mineral, of various shades of red, with sometimes a tinge of yellow or blue, or a smoky aspect. It is commonly translucent, often transparent. Principal localities, Ceylon, Pegu, and Greenland. Common garnet differs from the preceding, in being commonly opaque or only translucent; colour reddish, yellowish, greenish, or blackish brown. It is found in Sootland, Sweden, and other countries. Pyrope is a deep blood-red variety, in roundish and angular grains, completely transparent; chief localities, Germany and Ceylon. Others are distinguished by different names; as, pyreneite, which is a black variety; grossular, of a light olive-green colour; aphone, usually of a deep brown or orange-brown, and opaque; manganesian garnet, of a deep hyacinth or brownish-red; melastie, usually quite black and opaque; colophonite, of a grayish, dingy yellow, or reddish hue, and opaque; and topasolite, which is of a topaz-yellow. GAS-LIGHT. Gaseous compounds fitted for the purposes of illumination are abundantly produced during the decomposition or destructive distillation are abundantly produced during the decomposition or destructive distillation of d ferent inflammable substances. These are decomposed in establishments formed for the purpose, and the pure inflammable gases are conducted through pipes to the situations where they are required, and where their consumption may be regulated to the greatest nicety according to circumstances. Coal, oil, and resin are the substances which have been employed in this manufacture.

Coal cas was the kind first used, and it is still that which is chiefly consumed. The person who first applied it to useful purposes was Mr William Murdoch, of Soho, who, in 1792, employed it for the purpose of lighting his house and offices, then at Redruth in Cornwall. Little further appears to have been done for several years towards making the discovery public. Betwitt 1800 a precious garnet, or carbuncle, a beautiful crystallized mineral, of various shades of

sulphuretted hydrogen and carbonic acid gases, from which it is separated by

means of lime, in vessels called purifiers. The carburetted hydrogen gas, sufficiently pure for use, is then transmitted into gasometers, whence the pipes issue for the supply of houses and other purposes. A quantity of coke is left in the retort, which, with the tar, ammoniacal liquor, and other refuse matter, is applied to different uses in the arts.

The purification of coal gas is of great importance, because, if the sulphuretted hydrogen be allowed to remain, it is not only highly noxious during combustion, but in the event of the gas escaping it is no less an evil. It is fetid and unwholesome, and causes the immediate tarnishing of silver and other metals: fortunately its presence is readily detected by a piece of paper moistened with a solution of sugar of lead, and no gas should be burned which blackens it. The specific gravity of purified coal gas varies from '450 to '650.

The coal best suited for distillation is that which contains most bitumen and

last sulphur; and hence the superior purity of the gas procured from the Scotch cannel or parrot coal, owing to the comparatively small quantity of sulphur which it contains, and the more general use of this light in dwelling-houses in Scotland than in England. A chaldron of coals should yield about 12,000 cubical feet of purified gas, of which each argand burner, equal to six wax candles, may be considered as consuming from four to five cubical feet per hour.

OIL GAS is procured abundantly by the decomposition of oil trickled into a redhot retort, half-filled with coke or brick. It contains no sulphuretted hydrogen, not retors, nan-mued with code or brick. It contains no simpuretted nydrogen, requires no purification, and is much richer in carburetted hydrogen than coal gas. Sp. gr. about '900. Mr Brande states that "a gallon of whale oil affords about 90 cubical feet of gas, of an average specific gravity of '900, and an argand burner, equal to seven candles, consumes a cubical foot and a half per hour." Less of it is thus required than of coal gas for any given quantity of light, and the atmosphere of a room is less heated and contaminated by its combustion; but notwithstanding these advantages, the great expense has led nearly to the entire disuse of this kind of gas.

of gas.

RESIN Gas, equal in quality to that from oil, is procured in abundance by a peculiar treatment of resin, and considerable hopes were some years age entertained that it would come into general use; but later experiments seem to prove that in this country at least it cannot in point of economy compete with that pro-

The economy of gas light is variously estimated. According to Mr Brande, a chaldron of coals at 25s. should afford 1½ chaldron of coke at 13s. . £0 16 3 24 gallons of tar, ammoniacal liquor, and other products at 1d. . 0 2 0 12,000 cmbic feet of gas at 10s. per 1000 C. F. 6 0 0

"The cost of a lamp fed by gas, and giving the light of 7 candles, will be \$\frac{1}{2}d.\$ per hour; of Argand's lamp with spermaceti oil, \$3d.\$; of mould candles, \$\frac{1}{2}d.\$; and of wax candles, 1s. 2d. per hour." Dr Ure, in estimating the comparative economy of different kinds of light, and assuming the illuminating power from wax to be indicated by 100, states that from tallow to be 286; oil, 14'3; coal gas, 4'76; thus making the cost of wax about three and a half times that of tallow, and tallow about six times that of coal gas.

making the cost of wax about three and a half times that of tallow, and tallow about six times that of coal gas.

The light from gas, however, besides being procured at a smaller expense, is also more generally convenient than that yielded by other substances in the ordinary mode, as it may be reduced in an instant from the greatest splendour to the faintest degree of illumination by the simple adjustment of the stop-cock. Its uses in buildings of all kinds, whether for industrial or domestic purposes, are universally known and appreciated. Still more conspicuous, perhaps, is its superiority as a street light; and there can be no doubt that, from its application in this manner, our large towns have derived great additional security against the perpetration of crimes.

In London there are 18 public gas establishments, and 12 companies, and the capital invested in works and apparatus is estimated at £3,000,000. [Stocks.] GAUZE (Fr. Gaze), a very light and transparent silken fabric, supposed to have been first made in Gaza, a city of Palestine, from which it derives its name. British gauze is made chiefly at Paisley; but it is inferior to that manufactured in

France. [SILE MANUFACTURE.]
GAZETTE, a term applied to newspapers in several parts of the Continent. It is said to be derived from gasetta, the name of a small Venetian coin, the usual price of those first published in Italy. In this country the term is chiefly used in

reference to the official newspapers. The first English gazette was published at Oxford, whilst the court resided there, on 7th November 1665. On the removal of the royal family to the metropolis, the title was changed to the London Gazette, which is now published on Tuesdays and Fridays. There are also official gazettes issued on these days in Edinburgh and Dublin.

GENEVA (Du. Genevor. Fr. Genièvre), a spiritous liquor procured by fermenting a mixture of malt and rye, and distilling the product with juniper berries, by which a spirit is obtained having a peculiar flavour, derived from a volatile oil contained in the fruit. It is powerfully stimulating: and the volatile oil of the junipers having a special action on the kidneys, has led to its being used medicinally in dropsy and other diseases. Geneva is principally made in the Netherlands, and chiefly at Schiedam, a town of S. Holland, about six miles from Rotterdam, from whence it is exported in considerable quantities, especially to this country. and chiefly at Schledam, a town of S. Holland, about six miles from Rotterdam, from whence it is exported in considerable quantities, especially to this country, the East Indies, and the United States. In the United Kingdom, the annual consumption about the beginning of the present century was nearly 700,000 gallons; but under the blighting influence of the heavy duty shortly afterwards imposed by Mr Vansittart, it gradually fell off, and is now only about 18,000 gallons, though a considerable quantity, about 600,000 gallons, is still imported for re-exportation to the colonies, especially the North American and Australian settlements. [Gin. Spupre 1]

SPIRITS.] & GENOA.

the colonies, especially the North American and Australian settlements. [Gin. Spirits.] 8
GENOA. [Sardinia.]
GENTIAN (Ger. Gelber Ensian. Fr. Gentians Jaune), a perennial plant (Gentiana lutea) abundant in the Alps and in the meuntain forests of Germany, the roots of which are used as stomachic bitters. They are about an inch thick, externally reddish-brown; smell weakly aromatic; taste at first sweetish, then intensely bitter. They also occur of a paler colour; but care should be taken that they are not intermixed with those of white hellebore.

GERMAN SILVER, sometimes called white copper, or pakfong, is an alloy composed generally of copper, zinc, and nickel, the proportions varying according to circumstances. When intended as a substitute for silver, they are—copper 50 parts, nickel 25, and zinc 25. But the proportions in the genuine German silver, as made from the original ore found in Hildburghausen, are given by Keferstein as follows:—Copper, 40'4; nickel, 31'6; zinc, 25'4; iron, 26.

GERMANY (Ger. Deutschland), an extensive country situate in the centre of Europe, between lat. 45° 5' and 57° 50' N., and long, 6° 20' and 20° 10' E., bounded W. by Holland, Belgium, and France; S. by Switzerland and Austrian Italy; E. by Hungary, Galicia, Poland, and Russian Poland; N. by the Baltic. Area, 244,000 sq. miles. Population in 1838, 41,000,000. It is divided into 38 different states, independent as regards their interior administration, but, by the treaty of Vienna (1815), united into one body, called the Germanic Confederation, which, by means of a federative diet, professes to maintain the external and internal security of the country. The ordinary business of the diet is transacted by a permanent miner council, composed of 17 votes, of which 11 principal states, namely, the security of the country. The ordinary business of the diet is transacted by a permanent minor council, composed of 17 votes, of which 11 principal states, namely, the Austrian empire, the kingdoms of Prussia, Bavaria, Saxony, Hanover, and Wurtemberg, grand duchies of Baden, Hesse-Darmstadt, and Luxemburg, electorate of Hesse-Cassel, and duchy of Holstein, have each 1, and the other 27 only 6 votes; but when weighty affairs are under consideration, the diet forms itself into a general assembly, called Plenum, which contains 69 votes, of which Austria and the 5 German kingdoms have each 4 votes, and the others are distributed among the remaining states, according to their importance. The members convene at Frankfort en the Maine, and the presidency is vested in Austria fort on the Maine, and the presidency is vested in Austria.

fort on the Maine, and the presidency is vested in Austria.

The country, considered in a general point of view, is divided into two great portions by the Sadetic chain of mountains,—the northern and southern. The former is almost entirely level, including vast tracts of low sandy soil in the N.B., and swamps and marshes in the N.W.; and the coast is in some places so low as to require dikes to defend it from the sea; in this division, the soil, except in Saxony, is in general poor, but not unsusceptible of improvement. The southern portion is more diversified, presenting great ranges of hills, and in some districts extensive plains; the land is also superior, and in many places extremely fertile.

The climate of Germany is less variable than the nature of its mountain system, and the range of latitudes within which it lies, would lead us to imagine; and its vegetation resembles, in its general character, that of England, or rather the N. of France. The chief products are, corn, maise, buckwheat, garden fruits, pulse, potatoes, hemp, flax, hops, rapseed, inquorice wood, coriander seeds, mustard. The most common trees are, cake, seeches, firs, pinos, larches, alders, birch. The vine except in situations pouliarly sheltered, does not grow north of lat. 51° N. The wine country commences about the junction of the Neckar with the Rhine, and stretches southward; and about thirteen millions of einers are annually made on the Rhine, Neckar, Maine near Meissen, and Naumberg in Excony, in Austria and Bohemia.

some of the Austrian provinces. The domestic animals do not differ materially from those of the neighbouring countries. The Merino breed of sheep has been introduced into Saxony and other states, where it has succeeded so well that, after supplying a great internal demand, immense quantities of wool are now exported to Britain and other places, of a quality so fine that the Spanish wool trade has been nearly extinguished.

Germany is rich in minerals, particularly the Hartz mountains and Erzgeberge. According to a recent authority (Hosokhus' Germany), the principal are, silver, 123,000 marks annually, found chiefly in the Erzgeberge and in the Hartz; gold, 182 marks; iron, 3,000,000 cwt.; copper, 39,000 cwt.; tin, 5000 cwt.; iead, 200,000 cwt.; ainc, sulphur, coal, marble, alshaster, gypsum, alum; vitriol, bismuth, antimony, saltpetre, lime, asbestos, slate; rolling, mill, sand, and pumice stones; calcadony, basait, agate, amethysts, granite, porphyry, precious stones; and great quantities of spring and rock salt-6,000,000 cwts. are produced by 76 salt-works now in operation.

The industrious spirit of the German has urged them forward, notwithstanding numerous disadvantages, to considerable progress in manufactures. The principal are those of linen, in Silesia, and Bendemia, Westphalia; of woollen goods, on the Lower Rhine, in Saxony, Silesia, and Brandemburg; of silk, leather, cotton goods, and lace, in the Erzgeberge; of tapestry, paper, and glass, in Bohemia and Silesia; of mirrors, near Nuremberg; of china, at Berlin, Meissen, and Vienna; of delift ware, in various places; of jewellery, at Berlin and Augsburg; of iron wares, in Westphalia and the Rheniah countries; of firearms and swordblades, at Spandau, Potsdam, and some other places; of cannon, at several capitals; of gunpowder, tobacco, artificial flowers, straw hats, musical and other instruments, beer, brandy, liqueurs, vitriol, and sugar. The Germans are calebrated as sugar refiners. The manufactures of cotton were established during the war, in enu

emulation of those of Britain; but their inferior machinery, and the scarcity of fuel, cuites. The broad cloth of Saxony, however, and its thread, lace, linen, paper, and porcelain, are of superior quality.

The mental energy of the Germans has long rendered their book-trade a business of great importance; and of late years, owing to the continuance of peace and the growing demand in foreign countries for German books, this branch has greatly increased, and is now in some respects unperstance; and of late years, owing to the continuance of peace and the growing demand in foreign countries for German books, this branch has greatly increased, and is now in some respects unperstance; and the world. Before 1814, the annual amount of works published was about 200; in 1816, the number was 3197; in 1827 5106; in 1834, 6074. The publications are announced in catalogues chroulated at the farm their at Leipsic, at Easter and Michaelmas, which are attended by all the German booksellers, and by many from the adjoining countries. The catalogue of the Lesser fair of 1807 contained 4820 new books and pamphiets, or new editions. Of these 2824 were the Germanic Confederation), and were produced by 61 publishers. The works over confidence by the different states in the following proportions: Austria, 282; Prussia, 1161; Barnat, 489; Saxony, 689, including 566 for Leipsic alone; Wurtemberg, 331; Baden, 186; Hamburg, 187; Saxony, 689, including 566 for Leipsic alone; Wurtemberg, 331; Baden, 186; Hamburg, 187; Hamover, 108; other extens, 683. The number of booksellers and publishers is at present estimated at more than 1000; and, according to Dr Bowring, the number of persons engaged in the literary profession in Germany is reported to be about 18,000, independently of 4000 translator from foreign languages. This immense production is attributed to the general diffusion of education from foreign languages. This immense production is attributed to the general diffusion of education for the contraction of the contraction of the contr

Mostock, Wismar, and Lubee; on the North Sea, Hamburg, Altona, Bremen, and Embden; and Trieste on the Adriatic. The principal exports are wool, linen, wine, corn, wood, smoked and saided provisions, thread, iron, seel, Nuremberg wares, quicksilver and cinnabar, giase, mirrors, cattle, fruit, sait, polash, porcelain, and earthenware, wax, leather, lead, woollen and cotton goods, rags, bones, quills, skins, alum, lead, and vitriol. The chief imports are tropical and colonial produce, mostly at Hamburg and Trieste; British manufactures, principally twist and yarns, with cotton, woollen, and metal goods; wine, tobacco, southern fruits, faney goods and linseed. The chief port for emigration from Germany is Bremen.

The manufacturing and commercial prosperity of Germany was formerly much obstructed by the partition of its territory among so many separate communities, which not only gave rise to many factitious interests and conflicting systems of internal regulation, but prevents obstructed has been in a great measure removed by the commercial union or league, first formed in 1831, under the auspices of Prussia, and which has been since gradually joined by most of the other states. The professed object of this combination is to establish an entire freedom of trade among the German states, and to subject foreign trade to such restrictions only as the protection of national manufactures, or financial circumstances, may render necessary. Under the head Paussian Commercial Union, a detailed account is given of this colebrated league, and of its influence, viewed he connexion with the present state and prospects of the trade of Germany. Further information will be found in the articles devoted to the principal states, and the free cities or republics, Hamburg, Bamerer, Fannkroer, and Lurge.

Measures. Weights, Aed Monies.

MEASURES, WEIGHTS, AND MONIES.

threaming some general usages, particularly those which have arisen out of the German federative system.

The Massurase of capacity and length vary, but the divisions of the latter are generally the same, namely, the ruthe = 2 clafters, 6 ells, 12 feet, or 144 inches; the Rhineland or land-surveyor's foot = 12-36 Imp. inches.

The geographical mile = 8011 Imp. yards, or 4-50 Imp. miles; the long mile = 10,126 Imp. yards; the short mile = 6859 Imp. yards.

The Rhineland morgen = 10,185 Imp. square yards, or 42 Rhineland morgens = 10 Imp. acres nearly.

nearly

nearly.

The commercial pound contains 2 marks, 16 ounces, 32 loths, 128 quentins, 512 pfennings, or 102 heliers; the apothecaries' pound of 12 ounces, 96 drams, 288 scrupies, or 5760 grains = 5527 troy grains; the carat for jewels = 3171 troy grains;

= 5527 troy grains; the carat for jewels = 3·171 troy grains. Gold and silver are weighed by the Cologne mark of 8 ounces, 16 loths, 64 quentins, 256 pfennings, 518 hellers, or 4522 eschen = 36:18 troy grains; the fineness of gold is expressed by dividing the mark fine or other weight into 24 carats, each of 12 grains; the fineness of silver, by dividing the mark fine into 16 loths, each of 18 grains; in beth cases the mark fine containing 288 grains.

MONEY.—The integer of account (except in the few places where the Lubec currency is used).

18 grains; in both cases the mark fine containing 283 grains.

Monay.—The integer of account (except in the few places where the Lubec currency is used), is either the florin (guiden), or the dollar (thaler), called also the rixdollar, and sometimes the crown. The florin is commonly divided into 60 kreusers, each of 12 pfennings, and the dollar exervent, or of account (a nominal or fictitions money equal 1; florin), into 90 kreusers. In North Germany, however, the dollar is in general divided either into 24 good groechen, each of 12 pfennings, or as in Prussis, where the dollar of account is a coin, into 20 silver groechen, each of 12 pfennings. The different standards by which these denominations are valued may be described as follows:—

Leipsic or Constitution Money, introduced in 1800, and which formed the general standard of the empire from 1738 to 1763, was estimated at the rate of 9 rixdollar specie (or Old Imperial dollars), 12 rixdollars current, or 18 florins, to the Cologne mark of fine silver, making the value of each of these monies in sterling 4s. 6½d., 3s. 4½d., and 2s. 3d. respectively. The Leipsic rixdollar current is now nearly obsolete, and the colons are comparatively rare.

coins are comparatively rare.

The monies, weights, and measures of the different states are described under their respective heads; but an opportunity will be taken here of explaining some general usages, particularly hose which have arison out of the German federative system.

The Massurase of capacity and length vary, but the divisions of the latter are generally the same, namely, the ruthe = 2 clafters, 6 ells, 12 feet, or 144 inches; the Rhineiand or land-surveyor's foot = 12-36 imp, inches.

The geographical mile = 8101 Imp, yards, or 400 Imp, miles; the long mile = 10,126 imp, such and the rixediar species for 2 feet in the short mile = 6869 Imp, yards.

The Rhineiand morgens = 10,185 Imp, square yards, or 44 Rhineiand morgens = 10 Imp, acres

s fined principally to the higher departments of business.

Reicksgold, or 24 Gulden-Auss, is estimated at the rate of 24 florins to the Cologne mark of pure silver, whence the florin = 20 313d., or about 1s. 64d.; and the rixdollar current (1; florin) = 2s. 6;d. These, however, are chiefly nominal valuations of Convention money, at a rate ith higher than in that standard,—the Convention of florin being estimated in Reichageld at 1; florin, and the other denominations in proportion.

Prior to 1838, Reichageld was in common use in Rhenish-Germany, but is now mostly superseded by the new 24; florin rate.

2 Constitution florins or current rixdollars = 10 in Convention money = 12 in Reichsgeld.

The New Crown Standard, introduced in 1838, is valued at the rate of 34; florins to the Cologne mark of pure silver, whence the florin = 19; do rabout its 8d. This florin is a coin which has been adopted as the integer of account by the states of Southern and Western Germany, including Baden, Bavaria, Frankfort, Hesse-Darmstadt, Nassau, and Western Germany, including Baden, Bavaria, Frankfort, Hesse-Darmstadt, Nassau, and Western Germany, including the crown (kroneskfaler) = 5s. 94d. There are besides pieces in billion for 1, 3, and 6 kreusers.

The Prussian System is described under the

There are besides pieces in blicon for 1, 5, sand b kreusers.

The Principles is described under the head Pauseal. In 1834, the dollar in this system was adopted as the integer of account by several states of North Germany, including Hanover, Brunswick, and Hesse-Electoral or Cassel.

From the standards consist wholly of allver, which is the general measure of value. A variety of gold coins, however, circulate. The principal are the ducat (minted 67 to the Cologne mark 23] carats fine), worth about \$6.4d.; the gold florin \$6. 11d.; the Bavarian expoint \$90. Carl d'or, August d'or, George d'or, Christian d'or, dec., each worth nearty 16a. 4d.; these pistoles (minted 35 to the Cologne mark 312)

GHE 339 GIB

carats fine), were all reckoned originally at 5 Convention rixdollars current, but they now Dutch gold pieces for 10 and 5 guilders, and the bear an agio corresponding to the increased value of gold in relation to silver. Several of the gold coins have doubles and halves of proportional value.

Of foreign coins, the most common are the Dutch gold pieces for 10 and 5 guilders, and the Brabant crown, originally struck by the emperor in the Low Countries, equal about 4s. 6d.

GHEE, in Oriental commerce, is clarified butter, made generally from the milk of buffalces, and is an article of great importance in India, Arabia, and other Eastern countries. It will keep fresh for a considerable time, and is commonly conveyed in bottles made of hide, called duppers, which contain from 10 to 40

gallons each.

GIBRALTAR, an important military and commercial station belonging to Great Britain, situated on a mountainous promontory on the S. coast of Spain, at the entrance from the Atlantic into the Mediterranean, near the part where the sea between Europe and Africa is narrowest; the mole being in lat. 36° 7' N. and long. 5° 21' W. It consists of a town and a strongly fortified rock, having batteries mounting upwards of 1000 cannon. Population about 15,000, composed chiefly of British, Spaniards, Italians, and Jews, besides a garrison of nearly 3500 troops. It is ruled by a military governor.

of British, Spaniards, Italians, and Jews, besides a garrison of nearly \$500 troops. It is ruled by a military governor.

The promotory of Gibraltar consists of a vast mass of rock, extremely cavernous, and rising from 1900 to 1400 feet above the sea. It is about 3 miles in length from N. to S., varies in width from 1900 to 1400 feet above the sea. It is about 3 miles in length from N. to S., varies in width from 1900 to 1400 feet above the sea. It is about 3 miles in length from N. to S., varies in width from 1910 to 140 feet above the sea. It is about 3 miles in length from N. to S., varies in width from 1910 to 140 feet above the sea. Here, however, the fortistic and wholly inaccessible; the E. and S. sides are also steep and rugged; but on the W. side, fronting the bay, where the town is built, the rock declines into the sea. Here, however, the fortistic has a sea use a sea of sea of the town to sea of the town to sea of the town to sea of the town as the sea of the town as the sea of the town as the sea of the town to sea of the town as the sea of the countries, 199,971 tons. Mercantile difference

Mercantile differences are commonly referred to the judge advocate: from his award an appeal may be made to the governor, whose decision is final, unless the sum in dispute exceed £300, when a further appeal may be made to the privy-council. The increase of new residents is discountenanced; but foreigners are allowed permission to remain during specified periods, on giving

MEASURES, WEIGHTS, MONEY, FINANCES, &c.

Measures and Weights.—British measures and a weights are employed; also the following Spanish, ramely, the pipe of 117 galls. = 126 English wine galls., or 105 Imp. galls.; the arroba liquid measure = 3½ English wine galls., or 2.77 Imp. galls.; the arroba weight = 26 lbs. avoird.; the quint weithirds of the hard dollar, the reals and quartos of both being the same. The currency of 16 dollars, and of a small quantity of British cistle measure) = 8 Winchester, or 7½ Imp. bushels.

Mozer —The interest of account is the Spanish.

Money.—The integer of account is the Spanish hard dollar (or cob) divided into 12 current reals, are drawn at 90 days' date; and on Cadiz, Macach of 16 quartos, or into 100 cents.

CIRCULATION.

GUICLISTON.

ACCRULATION.

Bills on London, Marseilles, Paris, and Genoa, hard drawn at 90 days' date; and on Cadiz, Macach of 16 quartos, or into 100 cents.

GIN

days of grace are 3, except when the term
"fixed" is inserted. The exchange on London
(90 days' date) is usually at from 50d. to 51d.
per dollar,—the pillar dollar, however, bearing
Extipping Duties are now levied on all vessels
arriving or touching at the port or anchorage in
lieu of the former quarantine rates; namely, for
every square-rigged ship having 3 masts, £7, 8. about
4d.; brig, £1, 14s. 6d.; schooner, sloop, sebeque,
galliot, or like rigged fore and aft vessels, with
6s. 8d. in addition when the vessel is liable to

GLA

The S. part of the promontory, called Europa Point, is distant 112 miles from Ceuts, on the opposite coast of Africa. Gibraltar is the Calps of the Greeks, who gave to it and Abyla, on the African coast, the mame of "the Piliars of Hercules." It was long in the possession of the Moore, and did not become an apparage of Spain until 1462. It was first fortified in the modern style by Charles V. In 1704, it was captured by the British, in whose possession it has since remained, but not without several attempts to retake it by Spain; these occurred in 1705, 1727, and 1779. The last was the most memorable, and lasted until 1763.

GIN, a spiritous liquor made in England, in imitation of Dutch Geneva. [Geneva.] It is generally prepared by adding various flavouring ingredients during the rectification of spirits made from barley or oats. The principal and only acknowledged one is the juniper berry; but oil of turpentine and other substances are said to be also used. The consumption of gin is chiefly confined to the labouring classes in England, and especially London. In Scotland and Ireland a preference is given to whisky. [Sriene.]
GINGER (Fr. Gingembre. Ger. Ingwer. Por. Gengivre. It. Zensero. Rus. Inbir. Sp. Jenjibre), the root of a plant (Amomum singiber) cultivated throughout both the East and West Indies and China. It occurs in knotty branched pieces, having a pleasant aromatic odour, and biting taste. There are two varieties, the

having a pleasant aromatic odour, and biting taste. There are two varieties, the black and the white. Black ginger consists of the inferior roots, which have been immersed in boiling water previously to being dried, and has thus a horny texture.

White ginger consists of the fairest and roundest roots, peeled when fresh, and dried in the sun. It is firm and resinous, more pungent than the black, and generally one-third dearer. The roots which are worm-eaten, light or soft, and very fibrous, are to be rejected. *Preserved ginger*, as manufactured in Europe, is dark and fibrous; but when prepared in the East or West Indies or China, from the young

roots, it is almost transparent. It is imported in jars, and should be chosen in large pieces of a bright yellow colour.

GINSENG (Fr. It. Du. & Ger. Ginseng. Sp. Jinseng. Por. Ginsao. Chin. Fansam), the root of a plant (Panax quinquefolium) indigenous to Chinese Tartary, but cultivated in Kentucky in North America, from whence the root is exported to China. It occurs in pieces about three or four inches long, frequently forked, transversely wrinkled, and of a yellowish colour; it has little or no smell, but a sweetish and slightly bitter-warm taste.

Of inseng is discarded from the Britiah materia medica, but it is in great repute in China, where, from immemorial ages, it has been extolled as a panaces or universal medicine; whence its present generic name, which signifies a remedy for all things. Pers Jarroux says that the most celebrated Chinese physicians have written volumes on the Gen-early, which they affirm to be able to ward off or to remove fatigue, to invigorate the enfeebled frame, to restore the exhausted animal powers, to make old people young, and, in a word, to render man immortal; this sample clause being, however, added by the more cantious, "if any thing on earth can do so." Hence the name general signifies the "wonder of the world," or "the dose for immortality." In 1799, the emperor sent an army of 10,000 Tartars in search of it, on condition that each soldier should give him two cattles of the best, and sell the rest for its weight in silver.

two cattles of the best, and sell the rest for its weight in silver.

GLASS (Fr. Verre. Ger. Glas), a well-known substance, in a high degree solid, brittle, and transparent, formed by the fusion of siliceous and alkaline matter. Five kinds are usually distinguished in this country:—1. Bottle-glass, the coarsest and most simple of any; 2. Broad-glass, a coarse window-glass, but of which there is an improved kind now made, termed British or German sheet; 3. Crown-glass, or the best window-glass, formed in large circular plates; 4. Flint-glass, or crystal; 5. Plate, or fine mirror-glass. These varieties are produced by differences in the proportion of the constituents, the nature of the alkali, the presence of foreign matters, or the processes of manufacture. Thus, green bottle-glass is made of impure materials, such as sea or river sand, which contains iron, and the most com-

^{*} In these charges the dollar appears to be estimated at 4s. 4d. sterling, according to Order in

GLA

mon kind of kelp or pearl-ashes. Window-glass is made of a purer alkali, and sand which is free from iron. Plate-glass is composed of sand and alkali in their purest state; and in the formation of flint-glass, besides these pure ingredients, a considerable quantity of litharge, or red lead, is employed. A small quantity of peroxide of manganese is also used, in order to oxidize carbonaceous matters contained in the materials of the glass; and nitre is sometimes added with the same intention. According to Mr Faraday, ordinary flint-glass contains 5193 per cent. of silica, 33°28 oxide of lead, and 13°77 of potash. The finest sand used in our glass-houses is procured from Lynn in Norfolk, and Alum Bay in the Isle of Wight.

In this country, the glass manufacture was at an early period of its history made an object of taxation, and in 1694, duties were imposed, which acted so injuriously that in a very few years the whole were repealed. About half a century later (1746), when the manufacture was in a more advanced state, a duty was again imposed, at the rate of one farthing per pound on the materials used for making bottle-glass, and one penny per pound on those used for crown, plate, and flint-glass. These rates were advanced from time to time in common with most other duties, and in 1793, stood as follows:—Bottle-glass, 4s. 0\ddot per cwt.; broad-glass, 8s. 0\ddot per cwt.; crown-glass, 16s. 1\ddot per cwt.; and for plate and flint glass, 2ls. 5\ddot per cwt. Further augmentations were afterwards made; and in 1813, when the former rates were doubled, they were—for bottle-glass, 8s. 2d. per cwt.; broad-glass, 2ls. 6d. per cwt.; crown-glass, 7s. 6d. per cwt.; and for plate and flint-glass, 9ss. per cwt. These rates were partially abated or modified in the years 1819, 1825, 1830, and 1835; and in 1833, they were fixed (1 & 2 Vict. c. 44) as follow:—Bottle-glass, 7s. per cwt.; broad-glass, or spread window-glass, 30s. per cwt.; crown-glass, and German sheet-glass, 7s. 6d. per cwt.; for material employed in the making of plate-glass, 6s. 8c. per cwt.; for materials or other preparation employed in making flint-glass is to be deemed broad or spread glass, and so to have the privilege of the low duties, unless it be blown in cones and spread on sand; and by 3 & 4 Vict. c. 22, the same duties were imposed upon broad or spread glass that are payable upon German sheet-glass.

These excessive duties have materially checked the use of glass in this country, and until within the last few years, the quantity made was less than before

These excessive duties have materially checked the use of glass in this country, and until within the last few years, the quantity made was less than before the war of 1793, notwithstanding the great increase of population in the interval. The vexatious and complicated regulations necessary for the collection of the duties have also so interfered with the manufacture as to prevent the introduction of many improvements,—especially in the economical processes. Hence, notwithstanding the advantages which Great Britain enjoys as to fuel, which forms a large part of the cost of the manufacture, and although she likewise possesses nearly all the materials of which glass is composed, and can procure the rest as cheaply as any other manufacturing country, yet there is not any other in which glass is made where its price allows our produce to be brought into competition with their own. The quality of British glass, however, is good, and our plateglass now rivals that of France. Of late years also, a gradual fall of prices has taken place, which may be held as an indication that some economical improvements have been introduced, notwithstanding the obstacles presented by the excise laws.

A separate cause of the disadvantageous contrast which the glass manufacture presents to our other branches of industry, is perhaps to be found in the fact that in order to work profitably under the excise regulations, it is necessary to conduct the processes upon so large a scale as to create a virtual monopoly of the manufacture in the hands of a few,—a state of things unfavourable to improvement. In the year 1839, the number of glass manufacturers in the United Kingdom was only 148; of whom, 124 were in England, 15 in Scotland, and 9 in Ireland. The principal English works are situated at Newcastle upon Tyne and Shields, owing to the cheap rate at which fuel can be obtained in those places; the others are mostly in or near Stourbridge, Liverpool, Bristol, St Helens, Warrington, Birmingham, Leeds, and London. The Scottish are chiefly in the districts of Edinburgh and Glascows and at Alloa. The Irigh et Dublin Cark Balfact Waterford and Newy.

one onesp rate at which the can be obtained in those places; the others are mostly in or near Stourbridge, Liverpool, Bristol, St Helens, Warrington, Birmingham, Leeds, and London. The Scottish are chiefly in the districts of Edinburgh and Glasgow, and at Alloa. The Irish at Dublin, Cork, Belfast, Waterford, and Newry. The statutory regulations of the manufacture are chiefly embodied in the glass consolidation duties act, 1 & 2 Vict. c. 44, and the 2 & 3 Vict. c. 25, already alluded to. These, especially the first, contain a multitude of minute technical provisions, to which, as the originals will doubtless be in the hands of all persons interested, it is not thought expedient to devote space here. See Supplement.

The following tables, the first of which is abridged from Mr Porter's "Progress of the Nation," will serve to illustrate the recent history and present condition of the manufacture:—

Account of the Progress of the Glass Manufacture from 1790 to 1830.

	1790.	1800.	1810.	1890.	1830.
Manufactured and retained for Home Consumption.					
Common Bottle	915,034	159,334	252.872	167,208	165,549
BroadCwt.	21,302	19,874	9,176	7,782	4,845
Crown or German sheetCwt.		55,891	69,252	70,253	84,178
Plate	7 44,02/	61,748	68,872	8,822 29,437	13,067 48,063
Plate, &c. imported	1,270 11,375	9,235 1,956	120	202	104 1,436
Net Revenue of Customs and Excise	£160,058	£188,240	£318,832	£469,609	£542,595

Table showing the Quantities of the different Kinds of Glass charged with Excise Duty, the gross Duty levied, the Duty drawn back on Exportation, and the net Revenue in the Year 1839.

	Quantities Charged.				Gross	Draw-	Net
	England.	England. Scotland.		Total.	Duty.	back.	Revenue.
	Cwt.	Cwt.	Cwt	Cwt.	£	£ 81,327	£ 88,481
Bottle-glass	366,039 8,514	107,021	12,106	485,166 8,514	169,808 19,771		88,481 12,771
Crown and German sheet	131,333	5,379	••••	136,712	502,417	66,892	435,525
Plate	28,413 90,084	7.467	7.407	28,413 104,955	85,239 97,958	5,846 21,142	79,393
	30,000	. ,,,	,,	,		175,207	692,986

The declared value of the exports has been for a late series of years as follows:—

1830. 1835. 1836. 1837. 1838. 1839. 1840.
£401,543 £640,410 £633,384 £477,767 £377,283 £371,306 £416,525

These exports, consisting principally of bottle-glass, crown and German sheet-glass, chiefly take place to the British colonies and India, which, indeed, take fully two-thirds of the whole; of the remainder, about £50,000 goes to the United States,

thirds of the whole; of the remainder, about £50,000 goes to the United States, £20,000 to Brazil, and the rest in very trifling quantities to various places.

The glass manufacturers are among the very few who seek for protection against foreign competition, and the import duty on foreign glass ranges generally from about 30 to 40 per cent. above the excise duty; it is, in fact, prohibitory; and although the difference of price in this country is from 100 to 200 per cent. higher upon inferior articles, such as bottles and common window glass, than in France and Germany, there is, owing to the bulky and brittle nature of these articles, no contraband trade. A small sum of customs duty appears annually in the public accounts, but this is derived almost wholly from bottles imported full of wine or spirits.

The common account of the origin of giass is that of Pliny, who relates that some sallors having landed on the shore of Phornicia, at the mouth of the Belus, and wishing to cook their provisions, placed some pieces of salt (of which their cargo consisted) under their pots to support them, there being no stones in the neighbourhood, when the heat formed the salt and the sand of the shore into a transparent liquid vitrified mass. This production was picked up by a Tyrian merchant, who was led to investigate its origin, and after many attempts succeeded in making giass. The Tyrian glass manufactures are known to be of high antiquity; and it is not improbable that an socidental vitrification might give rise to the discovery of giass; but Pliny's story is now accounted to be fabulous, as it has been lately accretained that the art must have been known to the ancient Egyptians. Of this we have evidence not only from numerous specimens of giass found in the combs and among the ruins of the temples, but also from the painted representations of the manufacturing processes preserved in the same places, and which prove that they were not only skilled in the art of fusing the materials, but also in the use of the blow-pipe,—an invention so ingenious as to indicate a high degree of civilisation. From Egypt the art appears to have been diffused among the Phornicians, Greeks, and Romans. In Rome, the glass makers, who had a particular street assigned to them, were chiefly employed in the manufacture of bottles and ornamental vases, and proofs of their skill may be seen in the British Museum, though the "metal" is usually thick and coloured. According to some authorities, glass was also employed by the Romans in glasing windows, but the first undoubted testimony of its application in this way is that of Lactantius in the fourth century, who compared a penetrating mind to one looking through a giass window. It

seems to have been first used in the glazing of religious edifices,—a purpose for which it was at a very early period imported into Britain.

In the middle agas, the art appears to have been confined to Italy and Germany. In the thirteenth century, the manufactories of Venice supplied the greatest part of the glaza for the fitteenth century, the manufactories of Venice supplied the greatest part of the glaza glass-making was first practised in the year 1557, when a manufactory was erected at Crutched Friars in London; and shortly after, another at the Savoy in the Strand. These establishments chiefly confined themselves to common bottle and window glass, all the finer articles being still imported from Venice. In 1673, a manufactory of plate-glass was established at Lambeth by the celebrated from Venice. In 1673, a manufactory of plate-glass was established at Lambeth by the celebrated from September 1998. The stablishment was soon after abandoned; and it was a century later before the manufacture of mirrors and fine glass was procecuted on a large ceale. The use of glass casements was long confident to the higher ranks, and it was near the end of the seventeenth century before the glasing of windows became general in this country.

GLAUBER SALT substate of sode.

GLAUBER SALT, sulphate of soda. [Soda].
GLOVES (Du. Handschoenen. Fr. Gants. Ger. Handschuhe. It. Guanti.
Por. Luvas. Russ. Russwissii. Sp. Guantes), coverings for the hands, made generally of leather, but frequently also of cotton, silk, worsted, and linen. Of the first, the finest are those made from the skin of the kid, which are extensively manufactured in this country, though of a quality inferior to those imported from France. In England, the chief seats of the leather glove manufacture are, Woodstock (distinguished for those of fine quality), Worcester, Yeovil in Somersetshire, London, Ludlow, and Leominster; in Sootland, superior gloves are made at Dundee. Cotton gloves are chiefly manufactured at Nottingham and Leicester. [Hosiert.] The principal kinds of gloves are described by Mr Perkins. in his [Hosiery.] The principal kinds of gloves are described by Mr Perkins, in his useful "Treatise on Haberdashery and Hosiery," as follows:—

Interise on Haberdashery and Hosiery," as follows:

"Kid is valuable in proportion to its elasticity. When this quality is united with closeness of texture, the gloves called 'town-made' are so superior to most others of our own manufacture, as to rival the French, and disprove the prevailing opinion of the superiority of the latter. Independent of the quality of the kid, a good glove is distinguished, first, by its being neatly sewed; secondly, by the thumb-seam not extending too far into the palm; and, lastly, by the colour of the exterior not having solled the inside. Most of the lower-priced English gloves, offered as 'kid,' are in reality made of lamb-akin. When what is called a kid glove feels unusually stout, it may be considered highly probable that it is only lamb-akin in imitation. It must consequently be understood that all good kid, in addition to the qualities already described, must be reasonably; French kid gloves are made in this country of French or Italian skins; and it is usual to apply to these the name which properly belongs to the former. The best skins are most deckledly the French; next, the Italian; and, lastly, those from Ireland. Limerick is a very sleasy and somewhat gritty feeling glove of the kid kind, made in Ireland; very little in demand except in that country. Beaver, though the quality is various, forms the commonest description of leather gloves. The Woodstock is a very superior beaver, to which much attention is paid both to the shape and sewing. Doeskis is a more thick, durable, and soft leather than the Beaver or Woodstock: in its make it does not excel the latter, though its surpasses the former. Buckakis is the closest grained, and consequently the strongest leather of which gloves are made in the latter, though trifling, is sufficient. It also bears cleaning better than any other kind. It may be had in white, drab, or buff. Skeepskis is generally white, and most usually made by contract for the army. Tax is of three qualities, common, drawn, and York. This is a very ser

The introduction of foreign gloves into the United Kingdom was prohibited until 1825, when it was allowed, on payment of a duty which ranges from 20 to 40 per cent., according to circumstances. The effect of this measure was to create a considerable competition between our manufacturers and those of France, and an improvement both in the quality and economy of the gloves made by the former. As a great increase also occurred at the same time in the importation of foreign goat, kid, and lamb skins, it may be inferred that the impetus produced by the change was likewise productive of a considerable augmentation in the quantity of leather gloves of home manufacture, although more recently this branch of the trade has received a check from the increased use of cotton gloves, especially the Berlin kind.

The quantity of leather gloves imported in a legal manner, at present averages about 1,200,000 pairs a-year, brought almost wholly from France, and yielding about £23,000 of duty. This, however, is much short of the actual importation, as the existing duties are still so high as to lead to a considerable smuggling trade, which Mr M'Gregor states can be conducted for a charge upon the fine gloves of only nine per cent. "I consider," says that gentleman, "that if the duty were

reduced one-half upon its present amount, the actual consumption of gloves would not be much greater than it is at present, but that it would tend nearly altogether to stop smuggling" (Par. Report on Import Duties, p. 12). Again, on being asked by the committee what advantages the French possessed over the English in producing gloves, he states, "The only advantages the French can have over the English in producing gloves are, first, that they have some method of preparing leather which is considered superior to ours, and the other is the price of labour; these, with greater skill and thrift, can be the only advantages" (Ibid. p. 13.) [Skins.] 8

Leather gloves must be imported in packages, each of which shall contain 100 dosen pairs of such gloves, and in ships of 70 tons burden or upwards, under penalty of forfeiture. (3 & 4 Wm. IV. g. 82, § 38.)

Gotton, woollen, and linen gloves are to be admitted to entry at the *ad volorem* duties chargeable on cotton, woollen, and linen manufactures respectively. (Tress. O. Dec. 3, 1830.)

GLUE (Fr. Colle. Ger. Leim), a well-known commodity employed for cementing wood. It is extracted from refuse animal substances, and differs in quality according to the materials employed; the best being obtained from the skins of old animals. It generally occurs in square cakes, and when good, is hard and brittle, of a semi-transparent and deep brown colour, and free from clouds and spots. That which is soluble in cold water is weak. The parings of hides, pelts from furriers, the hoofs and ears of horses, oxen, calves, and sheep, are largely imported for its manufacture.

monufacture.

GOAT, a well-known quadruped (Capra), nearly the size of the sheep, to which it is allied, but stronger, less timid, and more agile; and having horns, hollow, erect, and scabrous. Species of this animal are found in many parts of the world, but that which is domesticated in Europe (C. Hircus) is perhaps peculiar to this quarter of the globe. In most parts of the United Kingdom it is kept rather as a pet than for use; and even in Wales, where it was formerly plentiful, it is now comparatively rare, except in Glamorganshire, where some still exist in a wild state. In the S. of Europe, particularly Spain and Italy, goats are more extensively reared, and flocks of them are very common. The animal is not long lived. Its young are brought forth in March or April, and two are commonly produced at a birth. It feeds on the coarsest herbage, delights to frequent rocks and mountains, and may be reared profitably in such districts as will not carry sheep. Its flesh is esteemed as food in the countries where it abounds, and the haunches are frequently salted and dried; the female is in request for her milk; the horns are useful for knife-handlee; and superior candles may be made of the suct; but the part most valued is the skin, particularly that of the kid, which is extensively used in the glove manufacture. In the age of wigs, the hair of the goat was in great request, and even yet the pure white wigs sometimes worn by lawyers and clergymen are made of it,—the long thick hair on the haunches being that generally preferred.

The Angora Goat, inhabiting the district around Angora and Beibazar, in Asiatic Turkey; is in hich estimation for its soft and silky heir. The Cachmage or Thiket

preferred.

The Angora Goat, inhabiting the district around Angora and Beibazar, in Asiatic Turkey, is in high estimation for its soft and silky hair. The Cashmere or Thibet Goat, is a small beautiful creature, greatly valued for a delicate wool procured from between its long hairs. [Sauwes.] Attempts have been made to acclimatize this animal in Europe; and some success has attended the introduction into France of a Tartar half-breed which had been found to thrive in a colder climate. More lately (1836), a cross is said to have been obtained, at Frankfort on the Maire, between the Thibet goat and Merino sheep; but the fruitfulness of the hybrid progeny, and success of the experiment in a commercial point of view, have not yet been ascertained.

tained.

GOGUL, a species of bitumen much used in India for painting the bottoms of ships. GOLD (Dan. Guld. Du. Goud. Fr. Or. Ger. Gold. It. Oro. Por. Oiro, Ouro. Ras. Soloto. Sp. Oro. Sw. Guld. Arab. Tior), a beautiful metal, of a deep and peculiar yellow colour. It exceeds all others in ductility and malleability. It may be beaten into leaves 1-282,000th of an inch in thickness, and a single grain may be drawn out into 500 feet of wire. Sp. gr. 19-3. Fusing point, 2016° Fahr. Gold is not acted upon by any solvent except aqua regia, a mixture of muristic and nitric acids. It is unchanged by fire with access of air,—the hottest furnace producing no other effect upon it than to keep it in fusion, when it appears of a brilliant greenish colour. It, however, contracts more than any other metal in cooling. The uses of gold are numerous. Alloyed with copper or silver it is employed for coin, plate, and a variety of articles of luxury and ornament, for which purposes it is in the highest request, from its great beauty, unchangeableness, and lustre,

In the arts it is extensively used for gilding. Gold is found in the native state, in combination with silver, and often mixed with metallic sulphurets and in combination with silver, and often mixed with metallic sulphurets and arseniurets. It occurs in greater or less abundance in almost every part of the globe. It is obtained chiefly in the form of a fine sand from the Peruvian, Mexican, and Brazilian rivers, and from some of the African: in Europe, the Danube, the Rhine, the Rhone, and the streams of Hungary and Transylvania, afford small quantities. It also occurs in mineral veins in primitive mountains, but not of the oldest formation: it is thus found in Brazil, Peru, Mexico, Hungary, and Transylvania. It has been also found in grains and rounded masses in soils, evidently the ruin of rocks, which contained it in its natural situation; in this state it occurs on the coast of California, in Wicklow in Ireland, and in Cornwall. Of late years considerable quantities have been obtained in the Ural Mountains in Russia, in North and South Carolina, and in the adjoining Atlantic tracts of the United States. [Bullion. Coin. Plate.] S

GOMUTI. [Ejoo.]

GOODS, a general name for moveables, but usually restricted to merchandise. GOOSE. [Poultry.]

GOOSE [POUTRY.]
GOOSEBERRY, the well-known fruit of a bush (Ribes Grossularia) abundant in this country, alike in the garden of the nobleman and of the cottager. The catalogue of the Horticultural Society enumerates 200 kinds, but all prefer the temperate climates, with an inclination rather towards the cold than the warm. Hence the flavour of the Scotch berries is much superior to that of those produced in any part of England. In size and appearance, however, the gooseberries of Lancashire are said to be unequalled by any in the world; and there, as well as in Cheshire, Staffordshire, and Warwickshire, striking improvements have been introduced into the cultivation of this cheap and agreeable fruit.

GRACE. [DAYS OF GRACE.]

GRAM, in oriental commerce, a name given to the produce of various leguminous plants cultivated in India.

GRAMME, the unit of the French measures of weight, is equivalent to a cubic

GRAMME, the unit of the French measures of weight, is equivalent to a cubic centimetre of pure water, or 15 434 troy grains.
GRANILIA, the dust or small fragments of the cochineal insect.
GRAPES (Fr. Raisins. Ger. Trauben. It. Grappi, Grappoli. Por. Uvas. Sp. Ubas), the fruit of the grape-vine (Vitis vinifera), a tree with long slender branches, generally found indigenous in countries lying between 26° and 44° N. lat., and between 26° and 75° E. long., but the growth of which in the open air has been extended by cultivation 10° on each side of that range. This fruit is made an object of attention chiefly in the countries of the S. of Europe, although made an object of attention chiefly in the countries of the S. of Europe, although in none have grapes been produced equal to those of Syria, as regards the size of the berries and weight of the branches. Grapes are chiefly used in the manufac-In one have grapes been produced equal to those of Syria, as regards the size of the berries and weight of the branches. Grapes are chiefly used in the manufacture of wine, but they are also extensively consumed as food, and in this country are a common article of the dessert. For the latter purpose they are mostly imported in a dried state [Raisins] from Spain and Turkey; while a small kind, much used in puddings [Currants], are brought from the Ionian islands and Greece. A considerable quantity of undried grapes are also imported, principally from Portugal, in jars. In Great Britain, they are grown for the dessert in hot-house, except in the counties of the S. of England, where some species thrive in the open air. In former times, indeed, wine was largely made in those districts, from the grape; and in Devonshire there are reported to be still two or three vineyards maintained for that purpose.

GREAT BRITAIN. [United Kingdom of Great Britain and Ireland.]

GREECE, a kingdom in the S. W. extremity of Europe, lying between lat. 36° 16° and 39° 34′ N., and long. 20° 43° and 26° 20° E. It comprises Continental Greece, naturally divided by the Isthmus of Corinth into two portions, Hellas (called also E. and W. Greece), and the Morea, with the island of Eubosa, the Cyclades, and the N. and W. Sporades. It is surrounded by the Mediterranean, except on the N., where the continental part is bounded by Turkey. Area, 15,000 square miles. Population estimated at 900,000. The whole was divided in 1833 into 468 parishes (demoi). Capital, Athens; pop. 17,000. Government, a hereditary monarchy, hearly absolute.

nearly absolute.

The surface of the kingdom is in general mountainous, and the only extensive level tracts are in W. Hellas, and on the northern shores of the Morea; these, with small plains scattered through R. Greece, are the most productive districts. The climate is for the most part healthy, except in the marshy tracts adjoining the coast and lakes; and in the plains the medium temperature of the year is about 60° Fahr. About 3-4ths of the surface belong to the state and to the church,

and the rest to individuals; but only about 1-10th part is cultivated, the country being more pastoral than agricultural. The vegetable products have a great similarity to those of the S. of Italy. Helias possesses the best corn districts, the richest being perhaps Besotia, though the wheat of the Morea is that in highest repute; but the supply being insufficient for the consumption, large quantities are imported. The olive and currant-grape are also cultivated extensively. The mineral products are numerous, but only an insignificant quantity of any of them is obtained at present, except copper and salt, which last is procured in abundance in the lagoons near Missolonghi and elsewhere. The manufactures are mostly domestic, and quite inconsiderable. Greece is indeed naturally adapted for being a commercial rather than an agricultural or manufacturing state; and though none of the rivers are navigable, and there are founds, these are rendered less necessary than in most other countries, by the numerous bays and inlets on the coast, along which, as well as between the various islands, there is a perpetual intercourse. This is in a great measure to be attributed the maritime labits of the Greeks, and the extent of their mercantile navy, which, including small craft, amounts to about 4500 vassels, navigated by mearly 16,000 fragal, active, and hardy seasmen. This is exclusive of about 5000 men in the service of Turkey and Egypt. Most of the large vessels are engaged in the carrying trade between the ports of the Mediterranean and the Black Sco. of the Mediterranean and the Black Sco. of the strategie; the imports principally of corn, cotton, silk and woollen manufactures, sugar, and coffue. Nearly the whole foreign trade is centred in the ports of Missolonghi and Galaridi, on the W. coast of Hellas; Pirzeus (the port of Athemy), on the E. coast of Hellas; Pirzeus (the port of Athemy), on the E. coast of Hellas; Nauplia, Patras, and Cerinth, in the Mores; and Syra, Hydra, and Spexula, in the respective islands of the

MEASURES, WEIGHTS, MONRY, &c.

MEASURES, WEIGHTS, MONRY, &c.

The Measures and Weights decreed for the use: the expenditure at 16,447,126 drachmas, leaving of the kingdom are those of the metrical system a deficit of 4,065,119 drachmas. The expenditure in the includes 2,261,359 drachmas of interest on the kilo = 22 okes; and the cantar or quintal = 44 okes, or 119 lbs. avoird, restly. The strems of tracked in this country, namely, let, £300,000 in 1824, at 59 per cent; 2d, £2,000,000 in 1825, at 581 per cent; 2d,

of France, but the following are those chiefly in inse:—The oke = 3 lbs. 11 oz. avoird; it is like = 22 okes; and the cantar or quintal = 44 okes, or 119 lbs. avoird. nearly. The strems of land is 40 paces square; and the arpent is 12 acre nearly.

Distance is usually computed by the hour, estimated at about 3 miles. Time is reckoned by the old style.

Distance is usually computed by the hour, estimated at about 3 miles. Time is reckoned by the old style.

Money.—Accounts are stated in drachmas of 100 centimes. The drachma is a silver end weighing 69 grains troy, \(\frac{1}{2} \) the fine, and equal 32d. starting, or nearly \(\frac{1}{2} \) the fine = 14s. 24d. The which has been paid upon the second since 3 diver pleces of 5, \(\frac{1}{2} \), and \(\frac{1}{2} \) the dividend has been paid upon the second since 3 dividend has been paid upon the second since 3 dividend has been paid upon the second since 3 dividend has been paid upon the second since 3 dividend has been paid upon the first ince July 1837. The third, being guaranteed by drachmas, 15 centimes, = \(\frac{1}{2} \). The mine July 1837. The third, being guaranteed by drachmas also silver pleces of 5, \(\frac{1}{2} \), and \(\frac{1}{2} \) decreases are for 40 and 30 drachmas. The latter weighing 89 grains troy, \(\frac{1}{2} \), the fine = 14s. 24d. The copper coins are for 1, \(\frac{1}{2} \), and 10 centimes.

In December 1839, an ordinance was issued for the institution of a National Bank.

The Finances were in a miserable condition for some years after the conclusion of the war, and, though now improved, the income is still unequal to the expenditure. In the budget for 1837, the revenue was stated at 12,381,007 drachmas, and protection to the subjects of the two powers within the dominions of each other revenue was stated at 12,381,007 drachmas, and the dividend has been paid upon the first first of the first size of the size of the size of the siz

Prior to 1890, Greece formed a portion of the Turkish empire, but in that year a revolutionary struggle commenced, which, after many vicissitudes and atrocities, was brought to a termination by the interference of Great Britain, France, and Russia, and in 1889 its independence was acknow-bedged by the Ports. The government, however, remained disorderly until 1899, when, under the influence of the allied powers, the crown was vested in Otho, a son of the King of Bavaria.

GREENLAND, an extensive island situated between Iceland and the continent of N. America. It is subject to Denmark. Population vaguely estimated at

10,000, all Esquimaux, except about 250 Danish settlers.

The country is described as "a mass of rocks, intermingled with immense blocks of ice." The interior has not been explored by Europeans; nor is any thing known of the E. coast, except that

the shore consists almost wholly of one minterrupted glacier. The west coast, though high, rugged, and barren, is less cold and miserable than the other; and it is here that the Danes have established a few colonies, chiefly commercial and missionary establishments. The most ancient, called Good Hope, in lat. 64° 10′, possesses an excellent harbour. Uppernavie, in lat. 72° 48′, is the most northerly station. The vegetation is scanry, composed chiefly of mosess and ichems, with a few shrubs bearing edible berries. Rein-deer, haves, foxes, white bears, and dogs, exist on shore; but it is aquatic animals that constitute the principal source of wealth. The ordinary food of the natives consists of the caplin and the seal; the skin of the last supplies them also with dress. Whales are likewise common, especially towards the north; and walruses are met with in Davis' Straits. The Danes export from their different settlements train-oil, fish, whalebone, scalakins, flur, and elder-downs, the trade giving employment to about five or at vessels; while the seas within Beffin's Bay and Davis' Straits are frequented by vessels from most of the maritime states for the prosecution of the whale-fishery.

GRINDSTONES, circular stones on which edged instruments are sharpened. GRINDSTUNES, circular stones on which edged instruments are sharpened. They are formed of a species of hard sandstones, known in the N. of England under the name of grindstone-grit. The celebrated "Newcastle grindstones," exported to all parts of the world, are obtained from the quarries of Gateshead Fell, in the county of Durham; but the stones chiefly used in Sheffield are procured at Wickersley, in Yorkshire.

GROAT, an English silver coin, equivalent to four pennies, first minted in the region of Edward I.

reign of Edward I.
GROSCHE, a small silver coin and money of account in various parts of Ger-

many, equivalent to nearly 11d sterling.

GROS DE NAPLES, a plain silken fabric made of stouter and harder thrown organzine silk than sarsnet or persian, and woven with more care and labour.

GROS DES INDES, a silken fabric having a stripe formed transversely to its

length.

GROSS, in numeration, signifies twelve dozen. Gross-weight is the weight of merchandise including the package and dross around it.

GROUNDAGE, a duty payable in some places by ships coming to anchor.

GUACHAPELI-WOOD, the name given to a strong species of timber, the product of a tree found in Colombia. It is largely exported from Guayaquil.

GUAIAC, or GUM GUAIACUM, is a resinous substance obtained in various ways from the gualacum tree. It occurs in large amorphous hard pieces, with bits of bark sometimes adhering to them. It is of a friable texture, and naturally of a reddish-brown colour, but from the action of the air, the surface is generally of a deep greenish colour; it has a pungent acrid taste, but little or no amell, unless when heated. Sp. gr. 1-23. Those pieces are to be preferred which have slips of the bark adhering to them, and that easily separate from it by a quick blow. It is an article of the materia medica.

bark adhering to them, and that easily separate from it by a quick blow. It is an article of the materia medica.

GUAIACUM, or LIGNUM VITÆ (Fr. Gayac. Ger. Pockhain. Sp. Guagaco), a tree which grows to a great size in Jamaica, Hayti, and other West India islands. Its timber is resinous, colour greenish-black, taste acrid, and when kindled it gives out a pleasant odour. It is very hard; sp. gr. 1'333, being heavier than water, and indeed the weightiest timber known, and the most difficult to work. It is well adapted for stampers and mallets, for friction-rollers, castors, and turnery-ware; also for the sheaves or pulleys of blocks, a purpose for which it is much used; and its application may be seen upon a grand scale in the beautiful block-machinery at Portsmouth. A decoction of the capsules, wood, or bark, is also used in medicine. GUANO, a highly concentrated manure, is a dark yellow substance, of a strong ambrosial odour, found in deposits 50 or 60 feet thick, and of considerable extent, upon the coasts of Peru, the islands of Chinche, near Pisco, and other places

tent, upon the coasts of Peru, the islands of Chinche, near Pisco, and other places more to the south. It is said to be an accumulation of the excrements of herons,

more to the south. It is said to be an accumulation of the excrements of herons, flamands, and other birds inhabiting these localities. This substance has of late become an object of considerable trade. S

GUARANTY (or as it is generally but loosely called GUARANTEE), is an engagement to perform some act, or pay some debt, in case another person primarily liable fails to do so. In England, the term is generally used to express the contract of suretyship, whether for the payment of money or the performance of other obligations. In Scotland, a distinction is taken between what is termed a "cautionary obligation," and a guaranty or letter of credit, the former being a regular contract indigenous to the Scotlish jurisprudence, while the latter was introduced from the English law by the progress of commerce. "It [guaranty] is distinguished from a formal cautionary obligation," says Professor Bell, "chiefly by the looser epistolary form of the writing," and the chief practical distinction seems to be in the privileges accruing to the formalities employed in giving expression to the latter. [Cautionary Obligation.] In England, guaranty is affected by the 4th

section of the statute of frauds (29 Chas. II. c. 3), which enacts, "That no action shall be brought whereby to charge the defendant upon any special promise to answer for the debt, default, or miscarriage of another person unless the agreement upon which such action shall be brought, or some memorandum or note thereof, shall be in writing, and signed by the party to be charged therewith, or some other person thereunto by him lawfully authorized." Where a person has used expressions which bind himself in the first instance, and not merely on failure of another, the agreement does not come within the statute, nor does it, where the promise is to pay, not in the event of another failing to do so, but in consideration of the creditor performing some act which may be held a consideration between the creditor and the person who promises; as, abandoning a lien or security. Money paid or lodged in court, in fulfilment of a verbal guaranty, cannot however be recovered. There is no statutory provision resembling the statute of frauds applicable to Scotland; but "in Scotland the rule is; so that an acknowledgment or guarantee can be constituted by parole agreement; so that an acknowledgment or a reference to cath will not constitute an effectual guarantee. But this is not carried so far as, in England, the words of the statute have compelled the courts to go: If goods be furnished, or money paid, or indulgence given from the immediate execution of diligence, on the faith of the engagement, though verbal, and with the knowledge of the person so engaging, the obligation will be effectual by the law of Scotland." (Bell's Com. I. 371.)

By another doctrine peculiar to the law of England, the use of the term

By another dootrine peculiar to the law of England, the use of the term "agreement," in the above-cited section of the statute of frauds, renders it necessary that there should be a "consideration" appearing on the face of the writing [Contract.]. A consideration to this effect will consist in the creditor doing some act which, but for the guaranty, he would not have done. "It is enough," says Chief Justice Best, "if the person for whom the guarantor becomes security receives a benefit, or the person to whom the guaranty is given suffers inconvenience, as an inducement to the surety to become guarantee for the principal debtor" (Morley v. Boothby, 3 Bing. 113). Where the guaranty refers to future transactions, a simple reference to them will express a sufficient consideration; thus, "I guarantee the payment of any goods which A shall deliver to B," is sufficient, because A will have given a consideration before the time when the guaranty is intended to be effectual. But the following, "to the amount of £100, consider me as a security on J G's account," was void, as not expressing any consideration. "But where the agreement is retrospective, and refers to a past consideration, which it, however, states to have been moved by an antecedent request, from the guarantor, there it will be sufficient; for such a consideration would be sufficient at common law to support a promise, and the statute of frauds has made no alteration whatever with regard to the sufficiency of the consideration, but only requires that it should be in writing." (Smith's Mercantile L. 333, 384.)

In construing guaranties, the expressions are allowed to bear their full meaning against the guarant bands and a consideration and the against the guarantee, the expressions are allowed to bear their full meaning against the guarantee bands and a consideration is an and a construing guaranties, the expressions are allowed to bear their full meaning against the guarantee bands and an anamate and a consideration and a consideration and a consideration a

In construing guaranties, the expressions are allowed to bear their full meaning against the surety, but he cannot be held to have bound himself by implication farther than he expresses himself. The terms must be strictly complied with on the part of the person who takes the surety; and so where the guaranty contained a condition that 18 months' credit should be given, the taker, after having granted but 12 months' credit, was not allowed, after the additional 6 months, to come upon the guarantor (Bacon v. Chesney, 1 Starkie, N. P. C. 192). The taker is bound to inform the surety of the nature of the contract, and a fraudulent concealment will vitiate the guaranty—this was held where one guaranteed the payment of £200 value, to be delivered in pig iron, and there was a private agreement that besides the market-price of the iron, 10s. per ton should be paid towards the extinction of an old debt (Pidcock v. Bishop, 3 Barn. & Cress. 605). Whether a guaranty is general and continuous, and to be held to cover the balance on a series of transactions or is only applicable to one transaction, is a question which must be determined by the expressions used, and is often one of extreme nicety. On the one side, courts will not allow a dealer to reimburse himself by means of a guaranty evidently intended to apply to only one transaction, for losses on a general balance incurred in dealings originally undertaken at his own risk; while, on the other hand, they will not protect the person who grants such a general engagement as justifies a trader in continuing to rely on it, from the consequences. "If a party," said Lord Ellenborough, "means to be surety only for a single dealing, he should take care to say so." And he decided that the guaranty continuous (Merle v. Wells, 1810, 2 Camp. 413). Where a particular transaction is specified, or distinctly connected with the guaranty (as in the case of

its accompanying an order of goods to the amount guaranteed), the natural interpretation will be that the guaranty is not continuous. A guaranty will not have a retrospective effect, unless it be so expressed; but where one offered to purchase goods, which would not be delivered without a respectable reference, and next day brought a letter stating that if such goods as the purchaser wished to buy were supplied, the defendant would guarantee the payment, not exceeding £50, he was held responsible for the price of the goods bought but not delivered (Simmons v. Keating, 1819; 2 Starkie, 426).

In Scotland, a species of guaranty may be raised by the conduct of the grantor out of a mere letter of recommendation. A simple recommendation is not held to bind the grantor; but if it contains fraudulent and false information, to which the person to whom it is addressed has given credit, and has thereby been deceived.

bind the grantor; but it contains frauthent and sales information, to when the person to whom it is addressed has given credit, and has thereby been deceived, the writer is responsible as for a guaranty. Thus, where A wrote to B of a man whom he knew to be merely a labourer, saying "he had requested my line to some-body in the trade in Glasgow: and if you and he can agree as to the price, I have no doubt of your dealing to a considerable extent," he was held responsible (Corbet agt. Gray, 27th February 1794; B. C. I. 372). Independently of false information, a cray, 24th February 1/34; B. C. 1. 372). Independently of false information, are recommendation may be interpreted as a guaranty if it refer to any particular transaction, or to the credit of the party. Thus, where a letter introduced an individual "as intending to open for a sale of spirits and ale at the term," and continued, "the lad has always behaved with propriety hitherto, and I doubt not will give satisfaction in any transactions he may have with you," the first part was held as a mere introduction, but the latter as a guaranty (Ranken agt. Murray, 15th May 1812; F. C.). Where the recommendation is given in answer to inquiries by the person who acts on it, the expressions are interpreted more widely, and in favour of the writer. favour of the writer.

the person who acts on it, the expressions are interpreted more widely, and in favour of the writer.

A guaranty is discharged by the creditor giving the debtor time, or "extending the period at which, by the contract between them, the principal debtor was originally liable to pay the creditor, and extending it by a new and valid contract between the creditor and principal debtor, to which the surety does not assent" (Howell v. Jones; 1 Cr. M. & R. 107). This principle will operate where credit is given, beyond what has been usual in the course of dealing between the parties, but not in the case of mere forbearance. Laches or negligence will discharge the guaranty—neglect of notice of dishonour of a bill of exchange, payment of which is guaranteed, may be adduced as an example. When the surety has been brought under liability to pay, he has recourse against the principal. In equity he is entitled to be substituted to the creditor on any security charged with the principal debt. "Nay, it appears, that if the surety be under a disability, which prevents him from obtaining, in his own person, the benefit of securities which have been set apart for the creditor, equity will restrain the creditor from proceeding against the surety till he has resorted to those securities; though such circumstances would furnish no defence at law. And where the principal has assigned his effects to a trustee for his creditors, a creditor who has a guaranty will be forced, even at law, to apply, in discharge thereof, a rateable part of any payment he may receive from the trustee." (Smith's Mercantile L., 589.)

Each surety, where there are more than one, has a right to reimbursement from his co-sureties. This right is called the right of contribution. It is not affected by the questions,—whether the sureties bound themselves jointly and severally by one instrument, or by several instruments, and whether or not they were aware of each other's energerogenests.

by the questions,—whether the sureties bound themselves jointly and severally by one instrument, or by several instruments, and whether or not they were aware of each other's engagements. By common law, the contribution is according to numbers, but equity has regard to the insolvency of any of the sureties, "Thus, if A, B, and C, be co-sureties, A, having paid the debt, would be entitled to recover at law a third only from B, though C may have become insolvent; whereas, in equity, we will be entitled to one-half. But both in law and equity, if he have been reimbursed in part, the contribution must be calculated on the residue. And, it is said, that where one surety becomes so at the instance of another, that other canot call on him for contribution "Csmith's Mercantile L., 390). As to recourse on the principal debtor and co-sureties in Scotland, see Cautionary Obligations. (Fell on Guaranties. Pitman on Principal and Surety. Smith's Mercantile L. ut supra. Morton on Vendors and Purchasers, 377-393. Bell's Com. ut supra.) GUATIMALA. [Central America.]

GUATIMALA. [CENTRAL AMERICA.] S
GUERNSEY. [JEBSEY.]
GUIANA, or GUYANA, the name formerly given to the north-eastern portion of S. America, lying between the rivers Orinoco and Amazon; but as about five-sixths of this territory have been included within Brazil and Venezuela, the term is

how generally applied to the remaining part, comprehending the settlements of

and generally applied to the remaining part, comprehending the settlements of Great Britain, Holland, and France.

GUIANA (BRITISH), the most westerly portion of this territory, extends, as claimed by our government, from lat. 0° 40′ to 8° 40′ N., and from long. 57° to 61° W.; and includes the former Dutch settlements of Berbice, Demerara, and Essequibo. It is bounded N. and N. E. for nearly 350 miles by the Atlantic; W. Venezuela; S. Brazil; and E. Dutch Guiana, from which it is separated by the river Corentyn. Area about 75,000 square miles; of which, however, considerable portions are claimed by Brazil and Venezuela. Population in 1840 estimated, exclusive of American abortigines, at 98,000; the number of whites being about 4000, nartly tions are claimed by Brazil and Venezuela. Population in 1840 estimated, exclusive of American aborigines, at 98,000; the number of whites being about 4000, partly of Dutch descent, and the rest negroes and mixed races. The government is vested in a governor, and a "Court of Policy," consisting, besides that officer and his secretary, of the chief-justice, attorney-general, collector of customs, and five unofficial persons selected by the college of electors. All laws are enacted by the governor and this court, except the "Annual Tax Ordinance," the privilege of discussing and voting which is vested in the "Combined Court," a body which includes the governor, Court of Policy, and five financial representatives, elected by the inhabitants.

minoral for the first invertease shown in our public accounts.—										
	1835.	1836.	1837.	1838.	1839.					
Sugar Cote	1,990,656 297,007 3,166,091 1,140,361	1,077,848 2,004,888 964,906 3,467,442 1,080,697 10,009	943,388 1,482,129 299,894 5,118,642 993,388 6,107	835,300 1,506,946 253,477 3,799,298 663,639 6,723	566,852 1,442,550 117,238 1,673,232 551,325 2,220					

The other exports are mostly to our colonies in North America and West Indies; those to foreign countries are trifing. The value of the exports in 1836 was estimated at £2,135,379; but in 1839 the value hardly exceeded £1,000,000. The imports consist of cod-fish, wood, and immber, wheat and rice, from N. America; wine; and British produce and manufactures, including apparel and alops, cotton, lines, woolien, and leather goods, hats, glass, and eartherwer, iron, and a variety of other articles; the value of the whole imported into Demerars in 1836 amounting to £770,839, and into Berbice, £146,739; total, £911,677.

The shipping entered inwards in 1836 consisted of 716 vessels, burden 111,425 tons; of which from Great Britain, 66,914 tons; British colonies, 34,536 tons; United Btates, 7000 tons; foreign, 2936 tons.

The ports of the colony deserving of notice are only two, Georgetown and New Amsterdam. Georgetown, formerly called Btabrock, the capital and seat of government, is situated on the E. bank of the Demerars, a short distance from its mouth, in lat. 6° 40° N., and long. 58° 12° W.; pop. 20,000. The houses, made of wood, are generally two stories high, with portices and balconies, shaded by a projecting roof. The streets are wide and traversed by canals. Shops and stories are numerous, and European goods plentiful; the markets also are good. There are likewise many commodious warehouses and wharfs; but the latter can be safely approached only by small craft, on account of the declivity of the bank, and the ebbing of the tide, the rise of which on the coast is from 16 to 24 feet. Vessels not drawing more than 14 feet, load and lackerage their cargoes in the middle of the stream; but those of greater draught cannot enter the river, owing to a bar at its mouth, and must therefore complete their loading outside. Within a mile of the town, near the mouth of the Demerara, is a small mud-fort, called Fort William Frederick. The town being the depôt of the produce of the countries adjacent to the Essequibo and De

commerce is considerable.

New Amsterdam lies in lat. 6° 15' N., and long. 57° 21' W. at the confluence of the river Canjee with the Berbice, near the entrance of the latter into the sea, and about 57 miles R. of the Demerara; pop. 3000. The coast here is encumbered with shallows, and the harbour, though good, is difficult of access. From this town is exported the produce of the plantations on the rivers Berbice and Corentyn. Yessels drawing 14 feet may, it is said, sail 200 miles up the Berbice, while the Canjee is navigable 50 miles for schooners. The entrance of the former is protected by three batteries.

Measures, Weights, Money, Finances, &c.

Measures, Weights, Money, Finances, &c.

The Measures and Weights are chiefly British.
The Dutch eil of 26 inches = 27 Imp. inches, and 110 lbs. Dutch = 100 lbs. avoirdupois.

Money.—The monetary unit is now the dollar, divided into 100 cents, and represented by Mexican dollars and others of the standard weight. The currency is composed of bank notes, dollar, and British coins, principally silver. Gold doubloons are sometimes met with, especially when the exchange is low, when they are sent from Barbadoes and other W. I. islands to purchase bills on England.

Measures, Meights, Money, Finances, &c.

The British Guiana Bank, incorporated in the British Guiana Bank, incorporated in the British Guiana Bank, incorporated in The British Guiana Bank, have establish and the British Guiana Bank, have

Barbadoes and other W. I. islands to purchase bills on England.
Prior to 1840, the integer of account was the florin or guilder, of 20 stivers, each of 16 pennings; which, at the usual exchange of 14 florins per £1, was worth about 1s. 5d. A government paper money, formerly issued, was lately called in, and exchanged for dollars.

in silver.

Finances.—In 1836, the revenue of Demerara and Essequibo was £37,885, and of Berbice, £18,195; total, £106,081: the expenditure of the two former, £97,371; of the latter, £16,575; total, £113,946. The expense incurred by Great Britain for military protection in the same year was £45,421.

Duties.—The export rates and duties on produce are trifling. The general colonial duty on imports is 2 per cent ad valoress. The crown duties, levied only on foreign goods, are described under the head Colonies.

Guiana is by some said to have been discovered by Columbus in 1498; according to others, that honour is due to Vasco Nunes in 1504. In 1590, the Dutch settled on the Demerara; and in 1634, the English formed settlements in Surinam and the neighbourhood, which, however, were given up to the Dutch in 1667. In 1796, the settlements of Demerara and Essequibo were surrendered by Holland to Great Britain; in 1802, they were restored; but in 1803 were retaken, and have ever since been retained. Surinam, which had likewise been captured by the British, was given up in 1814. Previous to 1831, our possessions were divided into three colonies, Essequibo, Demerara, and Berbice; but in that year they were united under one government called British Guiana. In 1838, the slaves were emancipated.

In 1836, the slaves were emancipated.

GUIANA (DUTCH), OR SURINAM, a colony partly the property of the city of Amsterdam, extends along the coast about 200 miles, from the Corentyn river to the Marony; and between them to their sources, supposed to be in the Sierra Acaray. Area about 30,000 sq. miles. Population, exclusive of Indians and Maroons, 60,000; comprising between 6000 and 7000 whites, partly Jews and French, and upwards of 50,000 negroes. The seat of the governor is at the forress of Zelandia, near Paramaribo; he is assisted in his administration by a high council. The physical character of the coast is similar to that of British Guiana; but the interior, is which there is a kind of political society formed of maroons or runaway negroes, has not bees surveyed. The settlements and plantations are chiefly along the coast, and on the banks of the rivers Surinam and Sarameca. The chief products are sugar, 25,000,000 lbs., and coffee, the annual export of which is estimated at 4,000,000 lbs.; the others are cooca, cotton, rice, cassava, yams, timber, gums, and drugs. The chief intercourse is with Holland; provisions are obtained from the United States, in archange for rum and syrup; and a smuggling trade is carried on with Venezuela.

Venezuela.

Paramaribo, the capital, chief port, and commercial emporium of the colony, is situated on the W. bank of the Surinam, 18 miles from its mouth, in lat. 5° 40′ N., long. 55° 20′ W. It is built is the Dutch style, with wooden houses, and wide straight streets planted with orange trees; pop. 90,000. It maintains an active intercourse with Holland.

Measures and Weights, these of Holland, but chiefly according to the old system.

Money.—Accounts are stated in florins or guilders of 100 cents, Netherlands curre

more.—Accounts are stated in norms or guilders of 100 cents, Netherlands currency.

GUIANA (FRENCH), or CAYENNE, extends about 200 miles along the coast, from the river Marony, which separates it from Dutch Guiaua, to the Oyapock, forming its boundary with Brazil. Its interior limits are unknown; but its area is computed at 20,000 sq. miles. Population in 1837, 22,000, including 16,600 slaves. The administration is vested in a governor, assisted by a privy-council of severn official functionaries, and a colonial council of 16 representatives.

of seven official functionaries, and a colonial council of 16 representatives.

The country was first settled by the French in 1604, and, with the exception of a few interruptions during war, it has ever since been possessed by them. The settlements are neither so large nor so numerous as in British or Dutch Guiana; the plantations are chiefly on the island Cayenne, and there are a few on the adjoining coast and the banks of the Organabo: the remainder of the country is still possessed by the Indiana. Besides the staples noticed under the preceding heads, the French have transplanted the pepper-vine, clove, and nutmeg trees, from the Indian Archipelago, and the first two, especially the clove, are said to thrive well. In 1836, the exports were as follow:—sugar, 4,850,984 lbs.; molasses, 1,035,285 lbs.; rum, 12,765 gallons: coccas, 74,984 lbs.; office, 41,892 lbs.; cloves, 183,000 lbs.; pepper, 63,941 lbs.; cotton, 566,564 lbs.; arnatto, 639,403 lbs.; besides wood for cabinet-making, vanilla, indigo, and tobacco, and a variety of other articles; the total value being £125,000, nearly the whole of which is shipped for France or her colonies. The imports were about the same value, only one-sixth being from foreign countries. From 60 to 70 vessels enter annually.

Cayenne, the chief town and port, lies on the N. side of the island of that name, at the mouth of the river Ozsaoh, in lat. 4° 57 N., long. 52° 90′ W.; pop. 5000. The harbour is shallow, but vessels can ride in security in the roadstead.

Manuera, Waights, and Money, same as Faance.

GUILLD, a name given anciently to those commercial associations, or frater-

GUILD, a name given anciently to those commercial associations, or fratersities of particular trades, which were common in many of the towns. In their greatest prosperity, these companies, more especially in the metropolis, became important bodies, in which nearly the whole community was enrolled; each had its distinct common-hall and property, and made by-laws for the regulation of

its members

its members. GUILDER. [Florin.]
GUINDEA, the principal gold coin of the United Kingdom until the introduction of the sovereign. It was so called from having been first coined out of gold brought from the Guinea coast by the Royal African Company; these are generally distinguished by an elephant under the head, or a castle. [Coin.]
GUINEA COAST. [Nigrita.]
GUM. Under this term are included several modifications of a distinct proximate principle of vegetables. To some of these the term mucilage is occasionally applied; and all the varieties may be referred to one or other of these species,—gum-arabic furnishing a characteristic specimen of gum, and tragacanth or gum-dragon of mucilage. Gum exudes in a liquid state from certain species of trees, and becomes hard by exposure to the air. It is insoluble in alcohol, but extremely soluble in water, being exactly opposed in this respect to the resins. On the application of heat it swells and softens; it is infusible. Gum, from its adhesive quality, is extensively used in the arts. In calico-printing it is largely employed to give a casion of near is swells and softens; it is intustole. Gum, from its adnessive quality, is extensively used in the arts. In calico-printing it is largely employed to give a proper consistency to the cloth, previously to the application of the mordants. The gums which usually occur in commerce are, Gum-arabic, Gum-Senegal, and Tragacanth or Gum-dragon.

The term gum has likewise, of late years, been applied to several artificial products. The chief of these, *British gum*, a substance obtained by reasting starch, is often used as a substitute for gum-arabic in calico-printing, and for stiffening different goods. Other kinds have been extracted from the seed of the carob tree, commonly called St John's bread; and from several species of lichens indigenous

to this country.

to this country.

Gum-Resin. The resins, as they exude from trees, are often mixed with gum, when they form gum-resins. These substances are in their proporties intermediate to resins and gum, and are not therefore to be considered distinct vegetable principles. They are not entirely soluble in water or in alcohol, but proof spirit disolves the greater part of them. They also readily dissolve in alkaline solutions when assisted by heat; and the acids act upon them nearly as upon the resins. To this class belong ammoniacum, gamboge, assafestida, olibanum, aloes, myrrh, only my and others.

To this class belong ammoniacum, gamboge, assaucatus, caractus, caractus, opium, and others.

GUM-ARABIC (Fr. Gomma Arabique. Ger. Arabische gummi. It. Gomma Arabica. Arab. Samagh Arebee,) is obtained from the Egyptian acacia (Acacia nilotica or vera.) a tree indigenous to Arabis, but found abundantly in Africa. It consists of rounded pieces or tears of various sizes. When pure it is brittle, transparent, colourless, tasteless, and inodorous; but it usually occurs of a pale yellow-

ish or brownish colour. Sp. gr. about 1'4. The pieces which are most transparent, and have least colour, are sometimes selected from the gum-arabic in sorts, and sold for about double the price, under the name of picked gum. Gum-arabic dissolved in water yields a viscid mucilaginous solution which is much employed in the arts. "This solution is sometimes used as a glaze or varnish, and to give a gloss and stiffness to ribands, calico, &c. When substances in a state of minute mechanical division are suspended in it, it prevents their subsidence; hence, its employment as an ingredient of writing ink, and of some paints" (Brande's Chemistry). It is also used in mediane.

Gum-arabic is imported direct from Barbary, the Levent and the East In-

employment as an ingredient of writing ink, and of some paints" (Brande's Chemistry). It is also used in medicine.

Gum-arabic is imported direct from Barbary, the Levant, and the East Indies, and at second hand from other places. The best is called Turkey gumarabic; the worst is the East Indian, which is, indeed, a spurious substance, the greater part of it being obtained from the Feronia Elephantum, and found generally in stalactical fragments. About 25,000 cwts. are annually imported, two-thirds of which are entered for home consumption.

GUM-SENEGAL, procured from a species of Acacia, is similar to gum-arabic, but in longer and darker-coloured pieces, and of inferior quality. It is used for all purposes to which gum-arabic is employed, more particularly calico printing and dyeing. It is brought from Senegal and Barbary; and between 30,000 and 40,000 cwts. are annually imported; the quantity entered for home consumption being about 25,000 cwts.

GUN. The principal seat of the manufacture of small arms in this country is Birmingham, where it was introduced so early as the reign of William III.; and since that period it has been gradually but greatly increasing. During last war, the public contract for muskets alone extended upon an average to 360,000 a-year; and in the fifteen years prior to 1828, the number supplied to government and to private traders averaged annually 200,000. In the year 1813, a proof-house was established by act of parliament (53 Geo. III. c. 115), under the conduct of a master, wardens, and trustees, where the fabric of all gun and pistol barrels is tested by a heavy charge; all those which sustain the explosion receive a stamp, to counterfeit which is felony; while severe fines are imposed on those who sell such barrels without the stamp.

Great guns, or cannons, and mortars, are chiefly cast in the public founderies at

Great guns, or cannons, and mortars, are chiefly cast in the public founderies at Woolwich, under the superintendence of the Board of Ordnance; but they are also made on a large scale at the Carron Works in the county of Stirling. Indeed the peculiar variety called a carronade derived its name from having been originally

manufactured there.

manufactured there.

Firearms form an important item in our list of exports. Our principal rival in this branch of trade is Belgium, from whence they are sent in considerable quantities to America, Egypt, Turkey, Germany, Italy, and Spain. They are chiefly produced at Liege, where about 260,000 muskets and 90,000 pistols are made annually, mostly of inferior quality. A vast number of this description are sent to Brazil for re-exportation to the coast of Africa in exchange for negroes. [Gunrowder of Gunny, a strong coarse fabric extensively manufactured in Bengal, chiefly from the fibres of the plant called paat, or bhanges (Corchorus obtorius). It is used in making bags or sacks for sugar and other similar commodities; and the bags themselves form a considerable article of export from Calcutta. S

GUNPOWDER (Du. Buskruid. Fr. Poudre. Ger. Pulcer. It. Polvere. Por. Polvora. Rus. Poroch. Sp. Polvora), a composition formed of nitre, sulphur, and charcoal, finely powdered, and very accurately blended. The usual proportions per cent. in this country are as follow:—

Common Powder.	Government Powder.	Shooting Powder.	Shooting Powder.	Miners' Powder.
Nitre75	75	78	76	65
Charcoal 124	16	12	15	15
Sminhow 101	10	10	•	90

The proportions of commercial powder, however, vary indefinitely, according to the views of the manufacturer respecting markets and prices. The nitre being the only expensive ingredient, the proportion of this is diminished, and those of the other two increased, where cheapness is the leading object. The worst is that made for the Guinea trade; that usually experted to Canada and Turkey is also of inferior quality.

In the manufacture of powder minute attention is paid to the purity of the ingredients: they are mixed together with great caution, and pounded with well at the control of the control of the purity of the ingredients:

pestles in water, and formed into a kind of paste. The mixture is granulated or corned by being passed through sieves. After this it is glazed in revolving barrels, and then carefully dried. The more minutely the materials are ground, and the more intimately they are mixed, the greater is the explosive power. The strength also depends in a great measure on the drying. When well prepared, the powder, on being exploded on a piece of paper, should leave no residuum: if any particles remain, it shows either that the ingredients have not been pure, or not in proper proportion. The quality however is less tested by the expressed.

on being exploded on a piece of paper, should leave no residuum: if any particles remain, it shows either that the ingredients have not been pure, or not in proper proportion. The quality, however, is best tested by the eproweetts. Gunpowder, if much exposed, absorbs moisture, and it should therefore be kept as much as possible excluded from the air. It is usually packed in barrels, each weighing 100 lbs., half barrels of 50 lbs., or quarter barrels of 25 lbs.

The various uses of gunpowder are too well known to require description. The quantity consumed in this country is immense; besides which 4,000,000 lbs are estimated to be exported every year, the greater part of which is sent to the W. coast of Africa. In the public accounts, its exportation is included under the head "arms and ammunition," the annual declared value of the whole being about £400,000, mostly sent to Africa, India, Mexico, Turkey, United States, Australia, and Brazil; considerable quantities, however, are likewise taken by British America and West Indies, Spain, and Holland.

The manufacture and sale of gunpowder are regulated by different statutes, particularly the 19th Geo. III. C. 61, and 54 Geo. III. C. 189.

No dealer shall keep at one time more than 200 lbs., or if not a dealer, more than 50 lbs. within London or Westminster, or three miles of these cities; or within any other town, or within one mile thereof; or within two miles of any of the king's palaces or magazines; or within half-a-mile of any parish church; or in any other part of Great Britain except in the usual mills and magazines, on pain of forfeiture, and 2s. per lb. But for the use of any mine or colliery 300 lbs. may be kept, if within 300 yards thereof, and not within any of the above-mentioned limits.

Justices are to license the erection of mills and magazines for keeping unlimited quantities, except within the above limits.

No more than 25 barrels of gunpowder to be carried at one time by land, nor more than 200 barrels by water (except for exportation or coastwi

The early history of gunpowder is involved in obscurity. It is said to have been used from a very remote period in China and India; but it was unknown in Europe before the latter part of the 13th century. Early in the next century it was applied to the purposes of artillery. Barbour narrates that "crakys of war" were used by Edward III. In his first empaign against the Scots, A. D. 1387; and it is known that cannons were used by that monarch at the battle of Cressy, as well as at the slege of Calais in 1346; but the ancient war-engines continued to be partially employed in sieges for nearly two centuries afterwards. The use of muskets and other small arms was subsequent to that of cannons; and down to the end of the reign of Henry VIII., the bow continued to be the principal weapon of the English army. During the reign of Elizabeth, however, an entire change took place, and the use of firearms became general.

GUZ, an oriental measure of length, varying in different places from about 2 to

GUZ, an oriental measure of length, varying in different places from about 2 to 3 feet.

GYPSUM, a native sulphate of lime, different species of which are found in this and many other countries. The crystals are softish, commonly transparent, and of various colours. A beautiful fibrous variety called satin gypeum is found in Derbyshire, applicable to ornamental purposes, such as beads and brooches. Vulpinite, or Marbre di Bergamo, is a beautiful variety employed in statuary. A pure white species is known under the name of Alabaster. A common kind of it is converted into Paris plaster or stucco; and in some places where it is abundant it is employed as mortar, and as a top-dressing for grass lands.

Η.

HADDOCK, a fish of the cod family (Morrhua eglefinus, Cuv.), common throughout the British seas, especially on the E. coast betwixt Yarmouth and the Tyne; ordinary weight 2 to 4 lbs. Haddocks swim in immense shoals. They spawn in February and March, and are in the best condition for the table in October, November, and December. Those cured at the village of Finnan, near Aberdeen, are held in high estimation,

HAIR (Fr. Cheveu, Crin. Ger. Haar.) Human hair forms an article of some importance in trade, and a considerable quantity is imported, especially from France, for the making of wigs. It is preferred when long, fine, and dark coloured. The hair of the lower animals is applied to different purposes. That of the minever, martin, badger, polecat, and other beasts, is used in the manufacture of hair-pencils; while the coarser hair of the dog, wild boar, hog, and others, is made into brushes. Horse hair is extensively used by the upholsterer, and for fishing-lines, as well as in a variety of the arts. As an object of trade, this is classed into two kinds; the short curly, and the long straight. The former is spun into a cord, and boiled, to give it the tortnous springy form. The latter is woven into a kind of cloth, used for sieves, the damask haircloth of chair-bottoms, and other purposes.

into a kind of cloth, used for sieves, the damask haircloth of chair-bottoms, and other purposes.

HAKE, a species of cod (Merlucius vulgaris, Cuv.) found in the northern seas and Mediterranean. It is abundant on the S. coast of England, in the Bay of Galway, and on the Nymph Bank off Waterford. From January to April is its season for spawning. "It is a coarse fish, not admitted at the tables of the wealthy; but large quantities are annually preserved, both by salting and drying, part of which are exported to Spain." (Varrell's British Fishes.)

HALIFAX. [Nova Scotla.]

HAMBURG, one of the Hanseatic states, is situated near the mouth of the Eibe, between Hanover and Holstein, and comprises the city of that name and adjacent territory, with some islands in the river, and a few parcels of land on the south side of it. Area about 150 square miles. Population nearly 150,000, of which the city contains 128,000, mostly Lutherans, but including a number of Jews. The government is republican; the executive and legislative powers are vested in a senate of 36; but no laws can be made nor taxes imposed without the consent of the burgerschaff, or general body of the citizens, who are represented by three colleges.

which the city contains 128,000, mostly Lutherans, but including a number of Jews. The government is republican; the executive and legislative powers are vested in a senate of 36; but no laws can be made nor taxes imposed without the consent of the busperschaff?, or general body of the citizens, who are represented by three colleges. The city of Hamburg, the most important commercial emportum of the continent of Europe, is situated in lat. 56° 33° N., long. 9° 58° E., on the N. bank of the estuary of the Eibe, and E. bank of the Alster, about 76° miles from the North Sea. It was formerly fortified, but hangs suffered much during the late war, its ramparts have been since levelled, and converted into public walks. It, however, still resembles most of the old fortified towns of Germany, the streets being in general narrow, dark, and dirty, and the houses commonly of brick, ill-built, and old-fashloned; and though some of the streets in the new town are broad and regular, the appearance of the whole is uninteresting, almost the only callvening feature being the inner lake of the Alster and the adjoining walks. Hamburg also resembles a Dutch town in being intersected by canals; these are filled by the Eibe and the Alster, and almost all the warehouses are close to them. The city possesses numerous sugar-refineries, broweries, and distilleries; also manufactures of rope, saileloth, anchors, hats, soap, cotton, and woullen and linen fabrics, and a variety of other articles; but they are in some respects less prosperous than formerly. The alhyping belonging to the port (from 28,000 to 39,000 tons), which is inconsiderable compared with list trade, is mostly employed in transatiantic commerce and in coasting.

The Eibe, in the lower part of its course between Harburg on its left bank, and Hamburg and Altona on its right, is divided into several arms by five large and seven amall islands, which however units again in a single channel at Blankensee, about five miles below Hamburg. The arm opposite to the city, though not

HAM

exchanged while in the city), 5,963,500 lbs.; coffee, 46,000,000 lbs., and in transit, 8,980,500 lbs.; indigo, 1,862,600 lbs., and in transit, 1,418,600 lbs.; cocos, 1,505,000 lbs., and in transit, 152,000
lbs.; rice, 8,665,000 lbs., and in transit, 1,418,600 lbs.; cocos, 1,505,000 lbs., and in transit, 152,000
lbs.; rice, 8,665,000 lbs., ten, 1,301,000 lbs., and in transit, 9,434,000 lbs.; cotton, 11,788,000 lbs., and in transit,
6,465,000 lbs.; ten, 1,301,000 lbs., and in transit, 9,500 lbs.; besides large quantities of 8. American hides, cigars, ivory, saltpetre, cochineal, rum, and a variety of other articles. The quantity
of wine imported in 1838 was 48,940 hids., and in transit, 15,770 hids.; olive-oil, 1,965,000 lbs.,
and in transit, 707,900 lbs.; currants, 2,637,000 lbs., and in transit, 1,755,100 lbs.; raisins,
7,000,000 lbs., and in transit, 4,770,100 lbs.; silk, 190,400 lbs., and in transit, 90,700 lbs.
The trade with the British islands forms a highly important, though searcely an increasing
branch of the commerce of Hamburg. It is not shown separately in the public accounts; but the
aggregate of the whole trade of the Hanse Towns with the United Kingdom is given for a series of
years in Dr Bowring's "Report on the Frussian Commercial Union" (App. p. 114). Of this by
the the greatest portion belongs to Hamburg; that of Bremen being comparatively small, and of
Lubec quite trifing. The following are the averages of the amounts for each of the five years,
emdig 1834 and 1838 respectively:—

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	Average of the five years 1829-1833.	Average of the five years 1834-1838.
Official Value of Imports into the United Kingdom Exports from the United Kingdom, viz.	£1,404,216	£1,548,709
British Produce and Manufactures Foreign and Colonial Merchandise	8,801,990 1,687,996	8,654,961 1,827,391
Declared Volue of Exports of British Produce and Ma- nufactures.	4,358,650	4,665,767

Of British manufactures, nearly one-half now consists of cotton yarn and twist, for the supply of the weavers of flaxony and other parts of Germany; the chief other articles are cotton cioth, woollens, and woollen yarn, iron and hardwares, lines yarn, lines cloth, machinery, and coals. The exports from Hamburg to the United Kingdom consist principally of sheep's wool, and in scarce years, of corn; to which may be added seeds, especially rapeced, smalts, wines, shifting, furn, particularly fitch and martin, bristles, geneva, and some descriptions of cotton and lines records.

fur, particularly fitch and martin, bristles, geneva, and some descriptions of cotton and linen goods.

The British trade likewise comprehends the importation into Hamburg of tea, wine, indigo, tobacco, gums, especially shelise, furs, pepper, pimento, cassis, cotton-wool, rum, and other foreign or colonial articles direct from the United Kingdom; besides large quantities of coffee, sugar, and other tropical productions from the places of growth, particularly Brazil; while a considerable portion of the general business of the town is conducted by English residents, of whom there are from 1000 to 1500. In the year 1839, the aggregate burden of the British vessels which arrived amounted to 168, 196 tons; of which, steamers from the United Kingdom with general cargoes, 63,046 tons; salling vessels from do. with general cargoes, 47,161 tons, and with coals, 33,608 tons; from Brazil, 11,570 tons; from other parts of S. America, 299 tons; from West Indies, 3137 tons; from other countries, 3960 tons; and in ballast, chiefly to load for Newfoundland, which receives its salted provisions mostly from this port, 7345 tons.

The corn-trade is a department of considerable importance, Hamburg being, next to Dantzic, the chief entrepot where the grain of the N. of Europe (including the territory watered by the Bibe) is deposited to walt for the best market. In dear times it is brought from parts so distant as Bohemia; but the principal supply is derived from Holstein and the Lower Eibe, the wheats produced in which being coarse and damp, causes the general average of prices to be lower in the market of Hamburg than in Dantzic, where they are of superior quality. The quantity of wheat exported in the ten years ending 1837 was 675,744 quarters, of which 403,535 quarters were sent brank, 8900 qrs.; repeased, 130,060 qrs. in 1839, the experts of wheat amounted to 1,538,400 qrs.; barley, 285,700 qrs.; rye, 325,200 qrs.; oats, 83,600 qrs.; beans, 31,050 qrs.; pease, 62,750 qrs.; barley, 285,700 qrs.; on the Prussian Commercial Union

MEASURES, WEIGHTS, MONIES, DUTIES, &c.

Measures and Weights.—The ell of 2 feet or 5 | bs. avoird.; the centeer of 112 Hamburg lbs., alms = 22:58 Imp. inches; the Brabant ell= 7:58 Imp. inches.
The ohm, liquid measure, of 4 ankers, 5 cimrs, 20 viertels, 40 stubgen, or 160 quarters = 1 shipfund.
A stone of wool or feathers is 10 Hamburg lbs.; a stone of finx, 90 lbs.; a small tonne of wine is 4 oxhafts, or 6 tiercos.
The wippel, corn measure, of 10 scheffels, 20 | 4 centeers or 448 lbs. not; and a pipe of oil at a car 40 himters = 90 Imp. burbals : 3 wispals 1890 lbs. Measures and a representation of the Brabant en = 27:58 Imp. inches; the Brabant en = 27:58 Imp. inches.

The other, liquid measure, of 4 ankers, 5 eimers, 20 viertels, 40 studgen, or 160 quarters = lbs.; a stone of wool or feathers is 10 Hamburg ers, 20 viertels, 40 studgen, or 160 quarters = lbs.; a stone of fixx, 50 lbs.; a small tonne of wine is 4 oxhafts, or 6 tierces.

The wispel, corn measure, of 10 scheffels, 20 faas, or 40 himtens = 29 imp. bushels; 3 wispels = 1 last of wheat or rye, = 1 stock of barley or cats, = 10 f imp. quarters; and 2 wispels = 1 last of barley or cats = 74 imp. quarters.

The pound consists of 2 marks, 16 ounces, 32 loths, or 128 drachmes; and 100 lbs. = 106:82

13 přemings; and 3 marks ruske 1 dollar (or relchafaler). These denominations are of direct current money, or in bano.

Ourset money is composed of the coins in ordinary directation, and which, as none have been the soul Hamwerton money, chiefly sweydrittale, effect of the old many directation. The other was in 1818, when, and the advance of the French under the country of the c

12 pfennings; and 3 marks make 1 dollar (or reichsthaler). These denominations are of different values, according as they are reckoned in current money, or in banco.

Current money is composed of the coins in ordinary direulation, and which, as none have been for some time minted in the city, consist of Danish and Hanoverian money, chiefly sweydritten, and the remainder, amounting to 7,500,000 and the pieces equivalent to 2-3ds of the old important follar, or \$2.3d. sterling; each of the silver pieces equivalent to 2-3ds of the cid important follar, or \$2.3d. sterling; each of the silver pieces equivalent to 2-3ds of the cid important follar, or \$2.3d. sterling; each of the silver pieces equivalent to 2-3ds of the cid important follar, or \$2.3d. sterling; each of the silver pieces equivalent to 2-3ds of the cid important follar, or \$2.3d. sterling; each of the silver pieces equivalent to 2-3ds of the cid important follar, or \$2.3d. sterling; each of the cid important follar, or \$2.3d. sterling; each of the cid important follar, or \$2.3d. sterling; each of the cid important follar, or \$2.3d. sterling; each of the cid important follar, or \$2.3d. sterling; each of the cid important follar, or \$2.3d the cid important follar f

HAMS (Du. Hammen. Fr. Jambons. Ger. Schinken. It. Procedutti. Port. Presuntas. Rus. Okorokii. Sp. Jamones), the thighs of the hog, salted, smoked, and dried. [Use 1]

Presentas. Ras. Okorokii. Sp. Jamenes), the thighs of the hog, salted, smoked, and dried. [Hoa.]

HANOVER, a kingdom situated in the N.W. angle of Germany, between lat. 51° 20′ and 53° 51′ N., and long, 6° 51′ and 11° 51′ E.; and bounded N.W. and N. by the North Sea, Oldenburg, and the Elbe; E. and S.E. by Prussia and Brunswick; S.W. by Heese-Cassel, Lippe, and Prussia; and W. by Holland. Area, 14,570 sq. miles. It is divided into the provinces of Hanover, Hildesheim, Luneburg, Stade, Osnaburg, and Aurich, and the mining intendancy of Chaptal. Population, 1,722,107. Capital, Hanover, an inland city; pop. 28,000. The government is reputed a constitutional monarchy.

burg, Stade, Oznaburg, and Aurica, and the mining intenuancy or Ciburena. repulation, 1,722,107. Capital, Hanover, an inland city; pop. 28,000. The government is reputed a constitutional monarchy.

With the exception of the Harts, a chale of detached mountains on the S. frontier, the kingdom consists of an immense plain, a considerable part of which, called the "Arabia of Germany," is composed of vast sandy tracts, wholly unfit for tiliags. The fertile lands are confined to the banks of the rivers Elbe, Weser, and Ems, and their affluents; and to the flat coast of the sea, where artificial mounds have record from its ravages an expanse of very rich meadows,—the finest being the alluvial plains at the mouths of the Elbe and the Weser. The disadvantages of nature are not redeemed by art to the same degree as in other parts of Germany. Potatoss, the chief food of the poor, are universally varies a surplus for exportation; but the quantity of wheat raised is insofficient for the demand. About a sixth or a seventh part of the surface is covered with forests, which yield about 59,000,000 cubic feet of timber yearly; the principal woods are those of pine in the Hart district, and of beech and oak in Kalenberr, the Upper Weser, and the ducy of Bremen. Grazing husbandry is extensively prosecuted, but, excepting the rearing of horses, is little understood. The minor articles of rural produce are, flax, hemp, tobacco, hops, cranberrise random to the minor form an important source of wealth, but they languish under the system of interference excreded by the government. The most productive are those of lead and silver in the Hartz, from the vast forests of which fuel is readily obtained for working them. Iron ore is also richly diffused over the hilly districts, but the produce is comparatively inconsiderable. The chief other minerals are sait, copper, sinc, and vitrol.

The manufacture are very numerous, but none of them extensive. Woellens and calicoes are made at Gottingen, Munden, and some other towns; but percentage to

MEASURES, WEIGHTS, MONIES, FINANCES, &c.

Measures and Weights.—The ell of 2 feet = equal to 2s. 10id. sterling. But exchanges are 23°91 lmp. inches. The mile = 11.559 lmp. yes commonly effected in dollars, valued at 5 to the Imp. acre.

The morgen = 2 lmp. roods, 22½ perclies=64 lmp. acre.
The ahm of 2½ cimers, 4 ankers, 40.stubgens, or 30 kannen = 34°24 lmp. galls; and 6 ahms or 40 exhafts = 1 fuder of wine.
The corn last of 2 wispels, 16 malters, or 96 lmintens = 83 lmp. bushels.
The pound = 7511 troy grains, and 100 lbs. = 10/73 lbs. avolrd; the stone of flax is 90 lbs., and of wool 10 lbs.; the tonne of honey, containing 25½ stubgens, weighs 300 lbs.; the centier is 112 lbs. The last is 12 shipfunds, and the shipfund = 25½ stubgens, weighs 300 lbs.; the centier is 112 lbs. The last is 12 shipfunds, and the shipfund = 25½ stubgens, weighs 300 lbs.; the centier is 112 lbs. The last is 12 shipfunds, and the shipfund = 25½ stubgens, weighs 300 lbs.; the centier is 112 lbs. The last is 12 shipfunds, and the shipfund = 25½ stubgens, weighs 300 lbs.; the centier is 112 lbs. The last is 12 shipfunds, and the shipfund = 25½ stubgens, each of 14 lbs. Gold, allver, and silk are weighed with the Cologne mark.

Money.—The integer of account is now the Prussian rate, and the shipfund according to the Prussian rate, and the follow-ing old pleces, namely, the constitution of 25½ stubgens, or rixdollar of 36 mariengroschen, each of 8 pfennings = 35. 0½d.; 9 thalers cash or constitution money = 10 convention thalers.

Usance is 14 days sight. The days of grace are 8, except for bills at sight. \$\frac{5}{2}\$

Finances.—The country is heavily taxed, gast and about 1,300,000 thalers are derived from custice revenue averages annually about 6,580,000 tous duties. The national debt is variously estimaters. The direct imposts amount to about 1-3d, mated at from 10,000,000 to 30,000,000 thalers.

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HANSE TOWNS, a name given to certain towns situated in the N. of Europe, which formed in the 18th entury an association called the Hansestic league, having for its object the protection of mercantile property. It was so called from an old German word signifying union. The first point with the confederates was to repress the seisure of merchant vessels by pirates, and the robbery of goods conveyed by land; the next was to obtain justice in regard to the claims of merchants in courts of law,—a matter of no small difficulty in those rude times. The town which took the lead in forming this association was Lubec, the trade of which had become considerable in the 18th century, chiefly from its position. Situated at the south-eastern point of the Baltic, it was the natural entrepôt for the trade of Prussia, Poland, and Livonia, with the north-west of Germany; in the same manner as Hamburg, from its ready access to the North sea, was the fit port for communicating with the Netherlands and England. The distance between these towns by land being small (only 40 miles), frequent conferences took place in regard to their mutual interests; and the result was their concluding a treaty in the year 1241, by which they bound themselves to use their utmost efforts for the protection of trade. Brunswick, then the chief inland town in the north-west of Germany, and connected in trade with both Lubec and Hamburg, acceded to the treaty shortly afterwards; and in 1252, deputies from each of the three met at Lubec, where, among other arrangements of importance, they took steps for establishing the first of the protection of trade. the treaty shortly afterwards; and in 1202, deputies from each of the three met at:
Lubec, where, among other arrangements of importance, they took steps for establishing factories in London, Bruges, and Novgorod in Russia. Being open to
new members, they were joined in the course of the next century by a number of
cities, such as Amsterdam and other ports in the Netherlands, Dantzic, as well
for itself as for the lesser towns in the north of Poland, and Cologne, for the
different trading places on the Rhine. The confederacy attained its greatest
power in the 15th and 16th centuries, when the league comprised no fewer than 64 power in the 15th and 16th centuries, when the league comprised no fewer than 64 commercial places; and was capable of conducting extensive naval operations, and of asserting its rights by force of arms. As civilisation diffused itself, however, in the north of Europe, and the different governments made a point of protecting trade as well by sea as in their respective territories, less exertion was required on the part of the Hanse Towns. It became evident also from the example of Holland, that trade prospered most when each mercantile district or seaport was left to manage its own concerns. Hence a gradual relaxation in the bonds of the confederacy, so that during the last two centuries the name of Hanse Towns has been confined to Lubec, Hamburg, and Bremen. These towns have still mercantile consult in London and elsewhere: but they are occupied with the concerns of their consuls in London and elsewhere; but they are occupied with the concerns of their constituents only, not with those of the former members of the league.

HARBOUR. [PORT.]

HARDWARE (Fr. Clinquaillerie. Ger. Kurse waaren). [IRON MANUFAC-

TURES, &c.]
HARTSHORN. [AMMONIA.]

HARTSHORN. [Ammonia.]

HATS (Fr. Chapeaux. Ger. Hute. It. Cappelli. Por. Chapess. Sp. Sombrerow), well-known coverings for the head, are of several kinds. Beaver or stuff hats, the finest, consist mainly of two parts,—the body, and the covering or nap; the former of which is made of fine wool and coarse fur (generally eight parts rabbit's fur, three parts Saxony wool, and one part of lama, vicunia, or "red wool"), mixed, felted, stiffened and shaped; the latter of beaver-fur, made to adhere to the body by the process of felting. Plate hats, a secondary kind, have the nap composed of the fur of the musquash, nutria, or some other fur of comparatively small value; and for hats of inferior quality, coarse wool is employed for the body, and coarser fur, or sometimes fine wool, for the nap. Felt hats are a common kind without a nap; and the black glazed japan hats worn by sailors and others, have a body of coarse felted wool, and an outer glossy covering formed of a thick coating of black varnish or japan. A description of the processes of manufacture would be out of place here; but it may be mentioned, that from the time the materials are brought into the great factories (as Messrs Christy's of London) till the hat is finished, they engage the attention of from twenty to twenty-five distinct sets of workpeople. One of the most important is that by which the hat is rendered waterproof, an operation which is performed upon that by which the hat is rendered waterproof, an operation which is performed upon the felt body before the fur nap is added, by brushing on the former a composition of shellac, sandarach, gum-mastic, resin, frankincense, copal, caoutchouc, spirits of wine, and spirits of turpentine; the rectified naphtha made from coal-tar being,

however, sometimes substituted for spirits of wine. Hats are dyed black by means of a bath composed of water, logwood, sulphate of iron, verdigris, and gall-nuts. Silk hats, a cheap kind introduced of late years, are entirely different from the preceding; the body is composed of chip-straw, stiffened cambric, or coarse felted wool, and a covering or hood of woven silk shag is fashioned to the required shape, and drawn over it. The body is made in a rough way, and a resinous stiffening composition laid over the outer surface, to which the hood is made to adhere by a resulting third of rowish

peculiar kind of varnish.

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The finest stuff hats are made in London; but the bodies of many of those finished in that city are manufactured in Gloucestershire and Derbyshire. Plate hats are made in Lancashire, Cheshire, Staffordshire, and other places; felt hats at Atherstone, Rudgeley, Bristol, and elsewhere; silk hats in Manchesser, London, Glasgow, and other large towns. In Lancashire, hoods are also made on a large scale, for the supply of places where they are worked up. The annual value of the hat manufacture of the United Kingdom is supposed to be about £2,500,000, but there are no data for forming a correct estimate.

Hats are exported in considerable quantities to the colonies; they are also sent to Brazil and to the United States; the number taken by the last, however, is comparatively inconsiderable. The exportations to other countries are of trifling amount. The declared value of beaver and felt hats annually exported is stated in the public accounts at nearly £100,000, which, however, is less than one-half

amount. The declared value of beaver and felt hats annually exported is stated in the public accounts at nearly £100,000, which, however, is less than one-half the amount of those exported in 1830, which was (77,061 doz.) £209,849. The quantity imported is small, the duty of 10s. 6d. each operating as a prohibition.

Strow-hots, made chiefly of wheat-straw plaited in strips and sewed together, are worn by men in some parts of the country, but only to a small extent. Straw bonnets however are, as is well known, much used by females. An account of this bands of trade will be found under the head Sun will be found to the sun

branch of trade will be found under the head STRAW-PLAT.

Coverings for the head, formed of willow, straw, bark, and other rude materials, we find among the manufactures of nations in an early state of civilisation; but the use of woollen or felt for this purpose belongs to a later period. At what time felted wool was first employed for making hats it would be difficult to say. It is known, however, to have been used in Western Europe since the 14th century, though felted hats were long articles of luxury, and worn only by the rich. In the reign of Queen Elizabeth, they became common; and those of beaver were first introduced into general use. The hats worn at this period were of a great variety of shapes, some with crowns peaked, some flat and broad, and others round; each kind being, besides, differently coloured and rimmed. Shortly afterwards, the rim was made remarkably broad, and when worn, was liable to hang down; these were called slouched hats.

From the reign of Charles L to that of William III., very broad brims were in fashion; but being found inconvenient, first one, and then two flaps, were made to turn up, until about the time of Queen Anne, when a third flap was turned up, and the regular cocked hat formed. During the ensuing fifty or sixty years, cocked hats of various sorts were much in vogue; and in the Tailer and Spectator the "Mommouth cock," the "Ramillies cock," the "Hunting cock," and the "Military cock," are alluded to. About 1780, round hats became prevalent among the lower orders, and cocked hats were considered as a sort of distinction from them. About 1780, round hats became fashionable; and by 1790, cocked hats were no longer common.

HAVANA. [Cuba.]

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HAVANA. [CUBA.]

HAWKER. [Pedlar.]

HAY (Fr. Fois. Ger. Hew), a name applied in this country to natural grass, rye-grass, clover, or sainfoin, when out and dried for use as forage. According to Professor Low, no method of producing hay has been found comparable to that of the cultivated grasses. That made of natural grass, however, termed meadow hay, is the kind chiefly produced in England, especially in the western ocunties, and in the districts adjoining London, in which last it is brought to the greatest perfection: it is also the kind principally made in Ireland, and in the pastoral districts of Scotland. Clover hay, either pure, or mixed with rye-grass, is most common in the southern, eastern, and northern counties of England, and in the cultivated districts of Scotland. Sainfoin hay is confined to those districts that have a calcareous soil. In haymaking, the great object is to prepare it quickly, and with as little exposure to the weather and waste of the natural juices as possible. When this is done the hay will be sweet, fragrant, and of a greenish colour. Sometimes two crops are cut from the same ground in the year; but the last is never so good as the first in weight and quality. Clover hay commonly sells 20 per cent. higher than meadow hay, or than clover and rye-grass mixed.

The produce of hay varies greatly with the season and the quality of the soil. The usual weight of a crop of meadow hay is from 1 to 1½ ton per acre; of clover hay, from 1 to 3 tons; of sainfoin, from 1 to 2 tons; and of clover and rye-grass mixed, 2 tons per acre may be regarded as a good crop, but often the produce is

mixed, 2 tons per acre may be regarded as a good crop, but often the produce is

greatly more. Hay, in the field-rick, weighs somewhat more than 112 lbs. per cubic yard; after being compressed in the stack, it weighs from 140 to 180 lbs., and when old about 200 lbs.

The sale of hay within the district including 30 miles around London, is regulated by the act 36 Geo. III. c. 38, which provides that the load of new hay shall, until the 4th September, be sold by the load of 35 trusses, each of 60 lbs.; the load thus weighing 1 ton. After 4th September each truss may weigh 55 lbs. only.

Straw is sold by the load of 36 trusses, each truss weighing 36 lbs.

HAYTI, HISPANIOLA, or ST DOMINGO, next to Cuba, the largest of the Antilles, is situated between lat. 18° and 20° N., and long. 68° and 75° W. It is separated on the E. from Porto Rico by the Mona Passage, and on the W. and S. W. from Cuba and Jamaica by the Windward Passage. Length, 400 miles, and breadth 150. Area about 25,000 sq. miles, nearly the extent of Ireland. Population vaguely estimated at 1,000,000, mainly consisting of mulattoes, and of the descendants of aborigines mixed with Europeans and negroes; the number of whites and negroes of pure blood is small. Capital, Port-au-Prince. This island, formerly divided between the Spaniards and French, is now an independent state, with a government nominally republicant: the executive power being in a president with a government nominally republican; the executive power being in a president chosen for life, and the legislative in a senate and a chamber of deputies: it is, however, in fact a kind of military despotism with republican forms.

chosen for life, and the legislative in a senate and a chamber of deputies: it is, however, in fact a kind of military despotism with republican forms.

Hayti is a very fine island. In the centre rise the lofty mountains of Cibao, in some places 8000 feet high, which are covered nearly to the summit with vegetation and noble woods, and from them descend ammerous streams, which, uniting in four large rivers, bestow actreme fertility on the valleys beneath. From the Cibao hilly ranges branch off in different directions, running mostly from cast to west. In some parts there are extensive plains; the largest of these, called Los Llanos, lies along the S. coast from the town of St Domingo castward to Higuey, a distance of miles in length, and 30 in breadth; but it is only a bare savannah, used for pasture-ground. It is separated by a low range from the fertile but ill-cultivated plain of La Vega, about 50 miles long, and 30 in breadth. Except on the E., where low and swampy lands prevail, the shores are in general sold, and almost every where surrounded by small uninhabited islands and dangerous reefs. The cilimate of the lowlands is hot, humid, and, for Europeans, very unhealthy. As in other tropical countries, the year is divided between the wet and dry seasons. [Warr Itoras.]

Prior to 1794, the Island was celebrated for its extensive plantations of sugar, coffee, and cotton; and the average annual exports of the French portion consisted of 89,000,000 lbs. colego, 125,000 hoto. molasses, mides, and other articles, the value of 68,000,000 lbs. colego, 125,000 hoto. Seeding mides, and other articles, the value of 68,000,000 lbs. colego, 125,000 hoto. Seeding mides, and other articles, the value of 68,000,000 lbs. colego, 125,000 hoto. Seeding mides, and other articles, the value of 68,000,000 lbs. colego, 125,000 hoto. Seeding mides, and the plantations have now almost entirely dilar peared, crospit those of coffee, which are also much reduced. Cotton continues to be reared only in very series, and the plantal seri

MEASURES, WRIGHTS, MONIES, FINANCES, &c.

employed.

The carresu of land = 1-8125 acre.

The Money of account is the current dollar (or gourde), of 100 cents, the precise value of which cannot be assigned, as the coinage of the island, besides being of a very low standard, is acceedingly irregular. Since 1835, the customs duties

MEASUREM, WRIGHTS, MONIME, FINANCES, &cc.

The Measures and Weights are chiefly those must be paid in effective Spanish or North Ameof the old French system, including the "poids de marc." The old English wine gallon is also employed.

The carreau of land = 1-8125 acre.

The Mesey of account is the current dollar (or gourde), of 100 cents, the precise value of which about one-half is derived from import and export duties, three-eighths from territorial imposts, and theremainder from stamps, licenses, sometics, besides being of a very low standard, is exceedingly inventions. Since 1835, the customs duties

Hayti was discovered by Columbus on his first voyage (1495), and colonies were formed by the Spaniards, which, however, were much neglected after the conquest of the American continent. In 1897, the western districts were coded to Prance, natives of which country, mostly buccaneers, had previously settled there in an irregular manner. These districts were cultivated by the French with great care, and additional parts of the island being afterwards obtained, Hayti became the most valuable of their foreign possessions, especially after 1723, when the monopoly of trading companies was abolished. The prosperity of the island was at its height when, in 1791, revolutionary tumults arose among the blacks, which, in the course of a few years, led to the massacre or exputation of all the whites. After a time two republics were formed; but at length (1890) the whole was united under the authority of President Boyer, who, in 1882, also subdued the Spaniah portion of the island. In 1835, the independence of Hayti was recognised by France, to whom fr. 180,000,000 were guaranteed as an indemnity for the losses of the colonists: this sum was afterwards reduced to fr. 90,000,000, of which fr. 50,000,000 have been paid.

Under the existing constitution all Haytian citizens, of whatever origin, are distinguished by the name of blacks. Whites are debarred from either becoming citizens or proprietors of land; but Indians, Africans, or their descendants, are entitled to these rights after one year's residence in the island. The Roman Catholic religion is established; but all other sects are tolerated. The established religion, however, possesses no efficiency or influence in the state. Morals are generally disregarded; and the private habits of the people are chiefly characterised by indolence, ignorance, licentiousness, and filth.

HECTARE, the principal land measure in France = 2471143 Imp. acres = 2 acres 1 rood, 35 sq. poles, 111 sq. yards; or 17 hectares = 42 Imp. acres nearly. HECTOLITRE, a French measure of capacity, = 22 Imp. gallons or 21 Imp.

HECTOLITRE, a French measure of capacity, = 22 1mp. gamons or 22 1mp. bushels nearly.

HELENA, ST, a rocky but verdant island in the S. Atlantic, which formerly belonged to the British E. I. Co., and was surrendered by them to H. M. government at the expiry of their charter in 1833. Area, 47 sq. miles; population, exclusive of troops, 5000, consisting of Europeans, Chinese, and blacks. The island is important solely as being a place of refreshment for ships, and as a naval station. The climate is salubrious. James Town, the seat of government, and the only port, is in 15° 55' S., and 5° 49' W. There is a good anchorage, but the surf upon the shore is generally strong, narticularly about Christmas.

shore is generally strong, particularly about Christmas.

HELIGOLAND, a small fortified slaud nearly 3 miles in circumference, lying HELIGOLAND, a small fortified island nearly 5 miles in circumserence, lying in the German ocean, in 54° 12′ N., and 7° 53′ E., about 30 miles from the mouths of the Elbe, Weser, and Eyder; population 2400, chiefly fishermen and pilots. It was taken by the British from the Danes in 1807, and became a depot for goods which were smuggled into the continental ports during the war. In 1814, it was formally ceded to Great Britain, under whose government it still continues. Heligoland has lost its former consequence, but it would be again valuable in the event of war

has lost its former consequence, but it would be again valuable in the event of war with any of the neighbouring powers.

HELIOTROPE, a variety of jasper occasionally marked with red spots, whence its vulgar name of bloodstone.

HELLEBORE is of two kinds, black and white. Black hellebore is a plant (Helleborus niger) indigenous to the Alps, Pyrenees, and Apennines, and cultivated in our gardens for the radicles or small branches of the roots, which are used in madicial as a numerical. medicine as a purgative. White hellebore (Veratrum album) grows spontaneously in Switzerland and the mountainous parts of Germany, and its dried roots are

used in medicine, both internally and externally.

HEMP (Fr. Chanvrs. Ger. Hanf. It. Canaps. Rus. Konapli, Konopsi.

Sp. Canamo), a valuable plant (Cannabis sativa) of the nettle tribe, remarkable for the tenacity, durability, and elasticity of its fibres. It grows in Eastern countries, and from a remote period has been distributed over the N.E. of Europe. At present it is reared principally in Russia and Poland, and in Italy, near Naples. The plant is graceful in form, rising in northern latitudes to the height of 5 or 6 feet, and on the fertile soils of warm countries to 12 feet. It prefers a rich vegetable soil, though, according to an Italian saying, "Hemp may be grown every where, but it cannot be produced fit for use, either in heaven or earth, without manure." It possesses the anomaly of growing upon the same spot for successions. sive years without degeneracy. The seed is sown in northern countries towards the end of April or beginning of May, and the plant is pulled in autumn. Being diocious (i. s. with male and female flowers on different plants) there are two harvests; the first, of the male plants after they have discharged their pollen; the second, of the female, or seed-bearing plants, about a month later, when the seeds are ripened. The former is distinguished from the latter by its numerous flowers. After being pulled and dried, the female plants, besides being slightly thrashed in order to separate the capsules from the stems, hemp, like flax, is subjected to a steeping or water-rotting process, in order to destroy the texture of the glutinous substance which connects the fibres to the woody part of the stem. Sometimes the steeping process is omitted, and the hemp is simply dew-rotted, by being exposed, spread out on the ground, to the influence of rain and moisture. It then undergoes the several processes of drying, bruising, and scutching; after which it exposed, spread out on the ground, to the induction of rain and moisture. It then undergoes the several processes of drying, bruising, and scutching; after which it is bound up in bunches and carried to market,—that which breaks off or is shaken out in these operations, termed codilla, being of much less value. The best is of an equal green colour, free from spills, and having a strong, fine, thin, and long fibre. The produce of fibre varies from 30 to 50 stones and upwards per

Hemp then passes through various operations, according to the purpose to which it is to be applied. First it is heckled, and arranged into sorts,—the coarser being termed shorts and tow. It then passes into the hands of the spinner, of the whitster, and of the weaver to whom it is made into sailcloth, sacks, common towels and table letter and other coarse the late. and tablecloths, and other coarse fabrics. It is also very extensively used for the manufacture of cordage, but its employment for this purpose is less general since

the introduction of chain-cables.

The plant is cultivated to some extent in the counties of Suffolk, York, Somerset, and Lincoln; but throughout this country generally it has been found less profitable than corn; and with the exception of small quantities from Italy, and a few trifling shipments from other places, our manufacturers are almost exclusively supplied from Russia. It is principally shipped from St Petersburg and Riga; the latter being, in general, the finest.

St Petersburg hemp, derived from the provinces of Kaluga, Orel, Kursk, Tula, Smolensk, Mohileff, and Tschernigoff, is distinguished by the branck, or sworn inspectors, into three sorts,—clean, outshot, and half-clean; each in two classes, uncut and cut; the bulk consisting of the former class. The distinctions of winter-dried, spring-dried, and middle-dried, sometimes noticed, afford no criterion of quality, each proving sometimes better and at other times inferior to the others. It is shipped in bundles; that of clean weighs from 60 to 65; of outshot, from 50 to 60; and of half-clean, from 40 to 50 poods; 63 poods being equal to the ton of 20 cwt. The supplies are brought from the interior chiefly by water, the principal part arriving in June and July, the rest later. In the winter season (from November to May), purchases are sometimes made in anticipation of the next supply, part or all the price being paid in advance, and sometimes purchases are made of "remainders" of that of the preceding year. The latter will, of course, be ready for early shipment, while the former, called "contract hemp," can seldom be exported bere midsumer. But during summer, purchases may be made with the advantage of a better choice of qualities; though in general not only the exchange but prices are then higher than during the contract season, when dealers sometimes make cheap sales in order to raise money. The supply brought annually to the 81 Petersburg market is valued by Mr Clark in his "Russia Trader's Assistant," (Exports, p. 59.) at £1,000,000, provided by 24 or 25 traders.

Rigo lemp is distinguished by the branck as Ukraine, Polish, and Druyaner, each of these kinds having the following gradations of quality:—Rhine, or ist sorts, marked U R H, P R H, and D R H: Outshot, or 26 sorts, marked U O H, and P O H (none of Druyaner): Pass, or 36 sorts, marked U P H, P P H, and D P H: Codilla, marked H C. Purchases are made at this port in the same manner as at 5t Petersburg. The annual exports from Riga amount to about \$250,000.

The following from the Dundee price current of 9th August 1841 shows the comparative estimate in which the different kinds are held in the principal British market:—

Riga,	.Rhine,£41	0	0	to £	:		Petersburg, Clean,£39 0 0 to £40 0	0
	Outshot,38	0	0				Half-Clean,33 0 0 34 (0
••••	Pass,35	0	0	?	96 O	0	Codilla18 10 0 19 () (
• • • •	Codilla,19	0	U	1	80 O	0	India Jute) 0

During the last war, the price of hemp was subject to great fluctuations; rising from £25 a-ton in 1792, to £118 a-ton, the rate at which it stood in 1808 under the influence of the restrictions imposed by the Milan and Berlin decrees. Subsequently to 1815, it has oscillated between £24 and £50 a-ton. The import duty on undressed hemp since 1832 has been only 1d. per cwt.; on dressed, it is £4, 15s. per cwt., which is prohibitory.

Besides common hemp, a variety of other vegetable substances of the same nature, as coir, jute, and sunn, are imported into this country, in increasing quantities, from Ceylon, India, and the Philippines, and applied to the same purposes; and the

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whole of which are entered in the public accounts under the name of hemp. description of these substances will be found under their proper heads; an further account of the trade generally under Linen Manufactures, Rope, &c.

HEN

Account of the Quantities of undressed Hemp imported into the United Kingdom from various Countries, and entered for Consumption in the five Years ended 5th January 1840 :-

ſ	1835.	1836.	1837.	1838.	1839.
Russia. Italy France Asia America, chiefly United States Other places	18,996 37 50,408 3,157	Cwts. 556,458 4,784 30 21,057	Cwts. 891,675 3,196 15 170,252 5,347 3,206	Cuts. 581,000 4,960 7,306 131,405 110 5,605	Cwts. 781,012 14,691 19,546 167,139 2,226 11,079
Total imported	687,559	586,032	773,691	730,376	995,693
. Entered for consumption	643,122	567,892	651,613	733,378	908,735

In 1840, the quantities were, imported, 634,921 cwts.; entered for consumption, 737,291 cwts. he importations of codilia and tow of hemp are not distinguished in the public accounts from The importations of those of FLAX.

HEMP-SEEDS, the produce of the Cannabis sativa, abound in a thick mucilage, and are sometimes used medicinally for the preparation of emulsions: a useful oil is also obtained from them. About 10 or 12 bushels to the sore are considered as a medium produce. The best are held to be those obtained from Riga; but wherever procured, care should be taken that they are fresh, which will be known by their being heavy, and bright in the colour. About 3500 quarters are imported annually.

HEMP-SEED OIL, obtained from the seeds by pressure, is similar in its qualities to linseed oil. It is of a green colour, and strongly impregnated with the peculiar edour of the plant. It is made in immense quantities in Russia.

In ancient times the hemp-plant appears to have been valued more for its medicinal properties than for its adaptation to the manufacture of cordage. It contains a deleterious narcotic secretion of great energy; and in various eastern countries, an infusion of the leaves is at present much need for inducing the drowsy cestatic feeling for which optum is esteemed. The leaves, chopped very fine, are also mixed with tobacco for smoking.

HENNA, a reddish-brown substantive dye procured from the leaves of the Egyptian privet (Lawsonia inermis), is used extensively by Egyptian and Asiatic females for colouring certain parts of their hands and feet. It is also employed

in the east for dyeing ordinary stuffs.

HERRINGS (Du. Haringen. Fr. Harengs. Ger. Häringe, Heringe. It.

Aringhe. Por. & Sp. Arenques. Rus. Seldi). The herring is a fish (Clupea harengus) ranked by Cuvier in the same order with the pilchard, sprat, shad, anchovy, and white bait. The body is covered with scales, the upper part is blue or green according to the light, the lower part of a silvery white; ordinary weight b) ounces, and length 10 to 12 inches; owing to the gill-lids being very loose and opening wide, it dies almost the instant it is taken out of the water.

opening wide, it dies almost the instant it is taken out of the water.

The opinion of Pennant that the herring periodically migrates from within the Arctic circle to the British seas to deposit its spawn is rejected by modern zoologists. "The herring inhabits the deep waters all round the British coasts, and approaches the shores in the months of August and September for the purpose of depositing its spawn, which takes place in October or the beginning of November. It is during these months that the great fishing is carried on, for after the spawning is over it returns to deep water. The mode of fishing for herrings is by drift-nets, very similar to those employed for taking mackerel and pilchard, with a slight difference in the size of the mesh. The net is suspended by its upper edge from the drift rope by various shorter and smaller ropes called buoy ropes; and considerable practical skill is required in the arrangement, that the net may hang with the meshes square, smooth and even in the water, and at the proper depth; for according to the wind. smooth and even in the water, and at the proper depth; for according to the wind, tide, situation of their food, and other causes, the herrings swim at various distances from the surface."—" The size of the boat used depends on the distance from shore at which the fishery is carried on; but whether in deep or in shallow water, the nets are only in actual use during the night. It is found that the fish strike the nets in much greater numbers when it is dark than when it is light; the darkest nights, therefore, and those in which the surface of the water is ruffled by

a breeze, are considered the most favourable. It is supposed that nets stretched in the daytime alarm the fish, and cause them to quit the places where that practice is followed; it is therefore strictly forbidden." (Yarvell's British Fishes.)

The herring fishery has been prosecuted on the British shores from a remote period; but its early history is involved in obscurity. The progress of the Dutch herring fishery is well known. There is a popular saying in Holland that "the foundation of Amsterdam is laid on herring bones," in allusion to the fishery having formerly been its great staple. Under the stadtholders this fishery was considered as the right arm of the republic, and it was always entitled the "Grand Fishery." When in the height of its prosperity (about 1650), the total number of vessels which it employed, including those engaged in bringing salt and exporting the fish, was stated at 6400, and the number of mariners and fishermen at 112,000. The extraordinary progress of that people led to various measures in this country for encouraging the British fisheries. These measures assumed a variety of forms at different times,—such as fishing towns built at the public expense,—assofor encouraging the British fisheries. These measures assumed a variety of forms at different times,—such as fishing towns built at the public expense,—associations under royal patronage,—the strict observance of Lent,—remission of the salt duties,—the importation, duty free, of foreign commodities received in exchange for fish,—lotteries,—collections in churches,—rendering it obligatory upon victuallers to take yearly a certain quantity at 30s. a-barrel,—and lastly, direct bounties. These "encouragements" all failed in communicating any thing like permanent prosperity to the fishery; and some of them, particularly that of bounties, led to great abuses (Wealth of Nations, b. iv. c. 5). It would exceed the limits of this article to specify the different changes which took place in the bounty system. It may be mentioned, however, that in 1820, after various modifications, an allowance of 20s. a-ton, increasing under certain circumstances to 50s., was allowance of 20s. a-ton, increasing under certain circumstances to 50s., was granted on all vessels of from 15 to 60 tons fitted out for the shore fishery, exclusive granted on all vessels of from 10 to 00 tons inted out for the shore inshery, exclusive of a premium of 4s. per barrel on herrings cured gutted, and of 2s. 8d. per barrel on those exported. In a few years afterwards, the principle of bounties was abandoned; in 1826, the export bounty was withdrawn, and the bounty of 4s. was reduced 1s. each succeeding year until 1830, when it ceased altogether.

The withdrawal of the bounties, so far from having injured the herring fishery, has had a contrary effect. The fishermen, no longer encouraged to look to extraneous aid, and relieved from the intrusion of landsmen who engaged for a few weeks in the fishery for the nurpose of obtaining the bounty, have redoubled their

weeks in the fishery for the purpose of obtaining the bounty, have redoubled their exertions, and are now better clothed, better fed, and more temperate than before: while in many cases they have been enabled by their industry to substitute for the small boats formerly used others of much larger dimensions, and to provide themselves with superior fishing materials. The following statement exhibits a comparative view of the fishery both before and subsequent to the abolition of the bounties :-

Year to	No. of Barrels Cured.		ared.	Barrels	No. of Barrels Exported.				
April 5.	Gutted	Ungutted.	Total.	Branded.	Gutted.	Ungutted,	Total.		
1811	65,430	26,397	91,827	55,662	18,880	19,253	38,133		
1815	105,372	54,767	160,139	83,376	68,938	72,367	141,305		
1820	347,190	35,301	382,491	309,700	244,096	9,420	253,516		
1825	303,397	44,268	347,665	270,844	201,882	134	202,016		
1830	280,933	48,623	329,556	218,418	177.776	3,878	181,654		
1835	217,242	60,075	277,317	85,079	156,225	2,580	158,804		
1836	397,334	98,281	497,615	192,317	270,846	2,547	273,393		
1837	290,077	107,660	397.737	114,192	187,238	2,027	189,262		
1838	382,400	125,375	507.775	141,552	229,160	5,997	235,150		
1839	382,229	173,331	555,560	153,659	233,690	6,040	239,730		
1840	410,332	138,465	548,798	152,231	253,883	1,968	255,85		

Herrings are brought to market in three forms: fresh herrings are the condition in which they are taken from the sea; white or pickled herrings are merely salted and put into barrels; red herrings are gutted and salted, and afterwards hung up and fired with the smoke of green wood. Fresh herrings are consumed in considerable quantities in towns adjoining the coast; but it is the pickled and red herrings which form the great objects of the fishery. The boat fishery is that chiefly pursued when the fishing ground is not at a great distance from the shore. The deep-sea fishery, where the fishermen go out to sea wherever the fish are to be found, requires vessels of a larger description (generally from 30 to 80 tons), as the herrings are pickled and stowed on board. The vessels fitted out for this fishery commonly meet with the earliest and best herrings; and owing to the circumstance commonly meet with the earliest and best herrings; and owing to the circumstance

of the fish descriing parts of the coast which they have been accustomed to frequent, it is a more regular source of profit than the boat fishery, though it requires larger capital. The British cured herrings, though now much better than formerly, are still inferior to the Dutch; the British fishery, depending for its propagative upon quantity which than quality

curres larger exhital. The British cured nerrings, though now much better than formerly, are still inferior to the Dutch; the British flahery, depending for its prosperity upon quantity rather than quality.

The fishery is mostly on the N. E. coast, particularly at Wick and Dunbar; it is also pursued extensively in the Orkney and Shetland Isles, on the W. coast of Scotland, Isle of Man, Yorkshire coast, and at Yarmouth, where red herrings are largely cured for the home market. A great proportion of the Scotch cured herrings is sent to Ireland, especially to Limerick, and exported to foreign parts. In 1839, the total exportations from the U. K. were, to British W. Indies, 12,344 barrels; Prussia, 62,073; Germany, 18,021; Russia, 6074; Italy and Sicily, 29,648; Mauritius, 3340; Australia, 1760; other countries, 4429; total, 13,689 barrels; declared value, £143,067. The market abroad is much less extensive than it might be if no impediments were offered by heavy duties. In Spain, Portugal, Italy, and India, the consumption might be rendered much greater.

Notwithstanding the repeal of the bounties, the fishery is still under the surveillance of a "Herring Board," which has officers at the different fishing stations, to superintend the curing department, and who affix an official brand to barrels containing a certain quality of fish.

The "British Society for extending the Fisheries and improving the Sea Coasts" is a patriotic joint-stock company, which was incorporated in 1786, for building stations in the Highlands and Islands of Scotland. No dividend has yet been made by the corporation; but it is still expected that their lands, harbours, and

stations in the Highlands and Islands of Scotland. No dividend has yet been made by the corporation; but it is still expected that their lands, harbours, and buildings, may yield a rent.

The last of herrings is 13,000. The barrel is 32 old English wine, or 26½ Imp. gallons. The cran is 45 wine, or 37½ Imp. gallons. A cade is 500 herrings. SHICKORY, a tree (Carya) common in this country, and growing on a large scale in many parts of the United States. Several species are recognised, though no difference can be distinguished in their timber, which is cross-grained, the state of the distinguished in their timber, which is cross-grained, red at the heart, heavy, and exceedingly tough and strong; but it is subject to be attacked by worms, and it decays quickly when exposed to the weather. It is chiefly employed for carriage-shafts and springs, large screws, chair-backs, hoops, whip-handles, and similar purposes. The hickory was formerly combined with the Juglans or true walnut; but it is distinguished by the shell of its nuts not being deeply furrowed. The nuts of one species (C. olivaformis), called Pecan nuts, form a small article of N. American trade.

HIDES (Du. Huiden. Fr. Peaux. Ger. Häute. It. Cuoja. Por. Pelles.

a small article of N. American trade.

HIDES (Du. Huiden. Fr. Peaux. Ger. Häute. It. Cuoja. Por. Pelles. Rus. Koshi. Sp. Pellejos, Pieles), the skins of cattle, form an important branch both of our inland and foreign trade. Various kinds are distinguished. Raw or green hides are those in the state in which they are taken from the carcase; salted hides are those dressed or seasoned with salt, alum, or saltpetre, to prevent them from putrefying; and tanned or cured hides. The animals whose hides are met with in commerce are the ox, buffalo, and horse. The buffalo hide is larger and heavier than that of the ox, and is, besides, distinguished by a tuft of hair on the shoulders. Losh hides are buffalo and others dressed in oil in the same way as chamois skins. Muscovy or Russian hides are tanned and coloured of a brown or red colour. The quantity of untanned hides annually imported into the United Kingdom is now from 350,000 to 400,000 cwts., fully seven-eighths of which are entered colour. The quantity of untanned indes annually imported into the United Kingdom is now from 350,000 to 400,000 cwts., fully seven-eighths of which are entered for home consumption. Upwards of one-half of the whole importations is from Buenos Ayres; considerable quantities are likewise brought from Brazil, the East Indies, Cape of Good Hope, and United States; while smaller shipments are made from the N. of Europe, Morooco, Philippine Islands, W. Indies, Australia, and other places. The importations of tanned hides, owing to the heavy duty, are inconsiderable, seldom exceeding in a year 100,000 lbs. [Leather. Skins.] SHIMTEN a German corn measure awaying in different places.

HIMTEN, a German corn measure, varying in different places. HIRING. [BAILMENT. CARRIERS. CHARTER-PARTY. SHI TO SERVANT. PRINCIPAL AND AGENT.] SHIPPING. MASTER

and Servant.

HOG, one of the most useful and widely distributed of the domestic animals. POG, one of the most useful and widely distributed of the domestic animals. It possesses extraordinary fecundity, lives and thrives on almost every kind of food, and converts a given quantity of aliment into fat sooner than any other animal. Of the domestic hog (Sus aper) numerous varieties are distinguished. In England, the chief are—the Chinese hog, of eastern origin, small in size, delicate of aspect, and remarkable for its fecundity and disposition to fatten; the Neapolitan, smooth and black, also highly prolific, though not hardy; the Berkshire, middle sized.

and reddish-white colour, with brown or black spots, is much esteemed, the most generally spread of the native breeds, and is that commonly fed in distilleries; the Hampshire, chiefly of a white colour, is the best of the larger classes. Other varieties exist in various counties. In Scotland, there are several mixed kinds. In Ireland, they are usually of a large size and coarse form. In the hog, the same external characters indicate a disposition to fatten, as in other live stock. "The chest should be deep and broad, the ribs largely arched, the neck short, and the skin soft and elastic." (Low's Agriculture.)

The animal is fed for two purposes. The one is to yield pork, which may be used either fresh, salted, or pickled, and for which the pigs are ready in 6 or 8 months; the other is to produce bacon, prepared by salting and drying the flesh, and for which they are ready in 10 or 12 months. The smaller class of early feeding pigs is preferred for the former purpose, the larger class, as the Hampshire, for the latter. In the case of pickling pork, the carcass is cut into pieces, and packed in kits or barrels. When designed for bacon, the body is cut so as to separate the hams or legs from the flitches or sides: It is generally cured in the cold months, from September to April. The flesh of the hog is highly nutritive, and it forms a great part of the animal food of the labouring classes of many countries, especially England; while, from its ready reception of salt, it is better fitted for preservation than any other flesh, and is thus eminently adapted for sea voyages, for which purpose it is largely used.

In England, Yorkshire and Westmoreland are distinguished for the quantities of which are shipped to Liverpool. In Ireland, hogs are very generally reared, the pig being an inmate of almost every cottage; and large quantities of which are shipped to Liverpool. In Ireland, hogs are very generally reared, the pig being an inmate of almost every cottage; and large quantities of which are shipped to Liverpool. In

The exportations from the United Kingdom have increased of late years, and in 1839 the quantities and declared value were as follow,—bacon and hams, 31,519 ewts., £98,431; beef and pork, 66,222 barrels, £227,465; sent mostly to the W. Indies, and in small quantities to British America, Australia, Cape of Good Hope, Mauritius, India, Spain, and other places. The importations are now con-

siderable.

HOGSHEAD, a British measure of capacity prior to the introduction of the Imperial system. The wine hogshead contained 63 wine gallous = $52 \cdot 49$ Imp. galls.

perial system. The wine nogeness contained to wine gamoin — of the part of the ale hogshead contained 54 ale gallons = 54'92 Imp. galls.

HOLIBUT, a large flat fish (Hippoglossus vulgaris), sometimes confounded with turbot, but much inferior in quality. The flesh, though white and firm, is dry, with but little flavour. Its capture is principally confined to the northern galaxies.

HOLLAND [NETHERLANDS, KINGDOM OF THE]. S
HOLLAND [NETHERLANDS, KINGDOM OF THE]. S
HOLOGRAPH, in the law of Scotland, is an expression used to designate a
deed which, from being wholly in the handwriting of the granter, is, to a certain
extent, proleged, and probative without the solemnities which other deeds require in their execution.

in their execution.

HONDURAS (BRITISH), a settlement extending along the E. coast of Central America, between lat. 15° 54′ and 18° 30′ N., and long. 88° and 90° W. Arca, ill defined. Population in 1839, whites, 235; coloured, 7700; total, 7935. It is governed by a superintendent, who is assisted by seven councillors elected annually. The shore is studded with low coral isles, called keys, and the coast is rocky but fat; the land, however, gradually rises into a bold and lofty region, interspersed with rivers and lagoons, and sovered with noble forests. The country is rich in vegetable productions, and arrowroot and rice are grown to a small extent, but cultivation is neglected, and the inhabitant chiefly employ themselves in wood-cutting, principally the mahogany tree, of which this district is the chief seat, and collecting natural produce. The exportations in 1836 consisted of 9,763,293 garager feet of mahogany, 993 tons logwood, 3866 tons cochineal, besides hides, occar-nuts, cedar, turtle, and other articles.

Baltze, the only town and port, is built on both sides of the river of that name, in lat. 17° 30′ N.

Balize, the only town and port, is built on both sides of the river of that name, in lat. 17° 30′ N., long. 88° 8′ W. The houses, constructed of wood, are raised 8 or 10 feet from the ground, on

piliars of mahogany; pop. about 5000. There is excellent anchorage for vessels of moderate size, which is protected by the numerous keys from the heavy swells of the open sea. Besides the exportation of the produce of the colony, Ballize has of late years become the depot of British manufactures and foreign merchandise designed for the consumption of Central America, which are forwarded thence to Izabal and Omos.

forwarded thence to Izabal and Omos.

The imports as well as exports of Balise, and the colony generally, are estimated to amount to between £400,000 and £500,000. In 1839, 107 vessels entered, of which, belonging to Great British, 31; British colonies, 4; United States, 22.

The measures and weights are British, and accounts are kept in pounds, shillings, and pence currency. The nominal par of exchange with England is £140 Hondaras currency per £100 starling, but the premium on mercantile bills is always considerably higher. In 1837, the premiums was about 18 per cent., and in 1838, from 18 to 30 per cent. The Spanish dollar is valued at 6s. 8d. currency, the doubloon at £5, 6s. 8d. currency.

The public revenue amounts to about £30,000.

The British occupation of this coast appears to have been commenced by smugglers and logwood cutters from Jamafca, in the 17th century. In 1754, the settlers were expelled by the Spaniards, but permitted to return in 1763. In 1779, they were again expelled, but restored in 1783. The colony was once more attacked by the Spaniards in 1786, but unsuccessfully; and the coast from the Rio Hondo, on the N., to the Sarstoon river on the S. with the adjacent country, is now considered to belong to Great Britain by right of conquest.

HONE, a fine kind of stone, imported from Germany and Turkey, used for sharpening or setting cutlery. It is of a green colour, inclining to yellow, often marked with thin dendrical lines, and is moderately hard, having a fine close tex-

marked with thin dendrical lines, and is moderately hard, having a fine close texture resembling indurated clay.

HONEY (Fr. Miel. Ger. Honig. It. Miéle. Sp. Miel), a well-known product of the bee. Its taste is pleasant and sweet; smell balsamic, and various, according to the flowers from which it is collected. When new, it is viscid, thick, and smooth; when old, crystalline and granulated. The best is that which is freest from colour, and contains the largest grains when it concretes. That obtained from young bees, and which flows spontaneously from the combs, is the purest and finest; it is known by the name of Virgin honey. Honey separated from the wax by expression is less pure; and there is another sort still inferior, obtained by heating the combs before they are pressed. It is often adulterated, or originally bad. When collected where fetid flowers abound, as species of garlic, its smell is offensive. Genuine honey does not ferment spontaneously or mould. It is often mixed with water to increase its bulk,—a fraud known by its thinness, and having no tendency to granulate. More commonly flour is added as well as water. This kind also granulates very imperfectly, and the adulteration is detected by dissolving it in cold water, when the flour subsides. Honey is abundantly produced in this country. It is also imported from Narbonne in France and other places. S

It is also imported from Narbonne in France and other places. S
HOONDEE, in India, a native bill of exchange.
HOOPS, the circular bindings of casks or barrels.
HOPS (Fr. Houblon. Ger. Hopfen). The hop, a directous plant (Humulus lupulus), with a perennial root, is extensively cultivated in Kent, Sussex, and Herefordshire, on account of the female catkins, which, after being picked and kiln-dried, are used by brewers for giving a bitter flavour to beer, as well as for preserving it. Hops vary in produce from 2 to 20 cwts. per acre; from 10 to 14 cwts. is a favourable crop. The expense of forming new ground is frequently little less than £100 per acre. Warm seasons with little rain are required for good crops. Great heat after rains, and high winds, are particularly destructive, and they are exposed to numerous diseases and the ravages of many insects, so that

crops. Great heat after rains, and high winds, are particularly destructive, and they are exposed to numerous diseases and the ravages of many insects, so that their culture is both expensive and uncertain.

The finer flavoured and light coloured hops are pressed into pockets, or sacks, of comparatively fine cloth, which weigh about 1½ cwt. each, and are sold chiefly to the alc-brewer. The strong flavoured and high coloured hops are put into bags of a very coarse mat kind of texture, which contain generally double the weight of the pockets. These are used by porter and small-beer brewers. The fine flavour or aroma of hops does not exist a year. Beyond that time they become old hops; and are sold at a cheaper rate to the porter-brewer. A year or two longer, and the bitter itself disappears; and the whole becomes nothing better than chaff. The Nottinghamshire or North-clay hops, have the pre-eminence in rankness, and, accordingly, with a certain description of buyers, bear a higher price than the Kent, though that is not so high as the general price of Farnham hops. Of the Kent hops, the best are those grown near Canterbury ("Art of Brewing," Lib. of Useful Knowledge). The strength of hops is judged by the thickness and solidity of the catkins; and the flavour by the smell. catkins; and the flavour by the smell.

From 50,000 to 60,000 acres in England are occupied with hop gardens, about one-half being in Kent; and an excise duty of 18s. 8d. per cwt. is levied upon their produce (45 Geo. III. c. 94), for which, however, nearly a year's credit is allowed by 1 & 2 Wm. IV. c. 53. The quantities charged

with duty were, in 1835, 49,685,709 lbs.; in 1835, 41,874,913 lbs.; in 1837, 37,295,304 lbs.; in 1836, 35,801,224 lbs.; and in 1839, 42,896,629 lbs. The amount of duty in 1839 was £357,488. British hops are exported to Hamburg, Antwerp, 81 Petersburg, New York, Australia, and other places. The quantity imported is trifling, as the duty is of a prohibitory character.

British hops reimported are to be deemed foreign.—(3 & 4 Wm. IV. c. 62, § 33.) S

HOREHOUND (WHITE), a common herb (Marrubium vulgars), the leaves

HOREHOUND (WHITE), a common herb (Marrubium vulgars), the leaves of which are an article of the materia medica. They are of a whitish-gray, woolly appearance, and possess a faint odour, and a bitter, sharp taste.

HORN (Fr. Corns. Ger. Horn) is distinguished from bone by being soft, tough, semi-transparent, and susceptible of being cut and pressed into a variety of forms; properties which fit it for being employed in turnery, for knife-handles, and in the manufacture of comba, snuffboxes, lanterns, and other articles. The horns of the ox, goat, sheep, and other animals are largely used for these purposes; and besides those obtained in this country, about 30,000 cwts. are annually imported from abroad, two-thirds of which are entered for home consumption. The horns of goats and sheep are preferred from their being whiter and more transparent than those of other animals. of other animals.

and sheep are preferred from their being whiter and more transparent than those of other animals.

HORNBEAM, an indigenous British tree (Carpinus betulus), common in copees. In appearance it is graceful, resembling the beech. Its wood is tough, and well suited for tool-handles, eogs, and for other purposes in which strength is required; but it is coarse, and unfit for cabinet work.

HORSE, a noble quadruped (Equus caballus), whose beauty, strength, and docility have now connected him, directly or indirectly, with almost all the purposes of life. The horse is strictly herbivorous. His stomach is comparatively small, and he eats often. He sleeps very little, and frequently standing. The foal is used for work when about 3 years old. The horse lives for 20 years, but is seldom capable of much work after 15. The age can be ascertained by the teeth till the eighth year; after which he is said to be "past mark." In old animals, however, the gums shrink from the teeth, which are left very long, and become of a yellow or brown colour.

The horse is vastly modified in his form and character by the physical condition of the countries in which he is naturalized. The pony of Norway or of the Highlands of Scotland and the huge horse of the plains present extremes of strength and size; while, again, these contrast in a striking manner with the hight form and agile shape displayed by those fed on the arid plains and scanty herbage of warmer countries. To the intermixture of the last with the former the technical term blood is applied. Importations of them anciently took place from Spain and Barbary; and at a later period from Arabia. The African and Arabian horses, accordingly, have given their characters to the blood-horse of England and its innumerable varieties. "The animal in which this effect of blood is the most remarkable is the English race-horse. For the combination of speed with the necessary strength, this creature can scarcely be surpassed. He forms, however, a cessary strength, this creature can scarcely be surpassed. He forms, however, a race of artificial creation, admirably suited for a particular purpose, but not otherwise deserving of cultivation, except from this, that it is the stallions of this race that continue the excellence and purity of the parent stock. The hunter is perhaps the finest race of horses known. It combines the blood of the Arabian and other the finest race of horses known. It combines the blood of the Arabian and other races of the South and East with the powerful form of the horses of the N. of Europe in a much happier proportion than the race-horse. From the hunter downwards to the races where no mixture of southern blood can be traced, the gradations are innumerable. It is in this class that our road horses and hackneys, the borses employed in our coaches and carriages of all kinds, nay, often in the mere labour of heavy draught, are contained. It forms the most numerous class of horses in the country. But a large proportion is bad, having lost the hardiness and strength of the native race, without having arrived at the speed and other qualities of good breeding. The remaining class of horses consists of those in which no mixture, or a very alight one, of stranger blood is found. These are the ponies of our mountains, or the larger horses of the plains" (Low's Agriculture). Of the last, usually termed cart or farm horses, the most commonly enumerated breeds are—1. The Old English black horse, of very large size, chiefly bred in the midland counties, from Lincolushire to Staffordshire; 2. The Clydesdale, or breed of the central plains of Scotland; 3. The Cleveland Bay, the origin of the better kind of coach-horse, bred over the whole of Yorkshire and Durham; and 4. The Suffolk Punch, so termed from its punchy form. wards to the races where no mixture of southern blood can be traced, the grada-Punch, so termed from its punchy form.

"In a horse where speed alone is required, the chest must not be too broad; but

in a horse in which we require the power of active motion, or, in technical language, action, combined with endurance, there should be a sufficient breadth of chest, and a medium, therefore, is what is desired in the hackney and hunter. In the farm-

HOR 370 HOR

horse the chest should be broad, because in the farm-horse we require the power of draught, and not of speed. The chest of the horse behind the shoulders should be deep; his back, when we look for strength, without sacrificing this to mere speed, should be short; the ribs should approach near to the pelvis, as indicating strength, though if speed alone be required, this point may be sacrificed. The fore arm and hind leg to the joints should be muscular, and below the joints tendinous. The trunk should be barrel-shaped, but somewhat elliptical, and gently enlarging from the breast backward." (*Ibid.*)

The demand for horses for the saddle, for carriages, and for the heavier labours of every kind is very great. They are mostly produced on ordinary farms; but the race-horse and the finer animals for the saddle are bred chiefly in Yorkshire. A considerable number of blood horses are also reared in Ireland, especially in the rich grazing counties of Meath and Roscommon; they are smaller and clumsier than the English, but strong and hardy, full of fire and courage, and the best leapers in the world.

There are not any documents from which the number of horses kept in this

country can be ascertained. The elements for such a computation, which never were very complete, have of late years been rendered much less so through the repeal of the taxes levied upon such as are used for various employments. Mr M'Queen estimates the number in the United Kingdom at 2,118,195, but this we consider an exaggeration. The exportation of horses has of late years grown into importance. The quantity imported is inconsiderable.

importance. The quantity imported is inconsiderable.

The principal repositories in London for the sale of horses by public auction or private contract, are:—Dixon's, Goswell Street, on Tuesdays and Fridays; Horse Basaar, King Street, Portman Square, Tuesdays and Saturdays; Morris', late Aldridge's, Little St Martin's Lane, Wednesdays and Saturdays; Tattersall's, Grosvenor Place, Hyde Park Corner, Mondays and Thursdays.

There are few sources of greater annoyance, both to the buyer and the seller of the horse, than disputes with regard to soundness. "That horse is sound in whom there is no disease, nor any alteration of structure in any part which impairs, or is likely to impair, his natural usefulness. That horse is unsound that labours under disease, or that has some alteration of structure that does interfere, or is likely to interfere, with his natural usefulness." "In the purchase of a horse, the buyer usually receives, embodied in the receipt, what is termed a scarranty. It should be

does interfere, or is likely to interfere, with his natural usefulness." "In the purchase of a horse, the buyer usually receives, embodied in the receipt, what is termed a servanty. It should be thus expressed:—

"Received of A B forty pounds for a gray mare, warranted only five years old, sound, free from vice, and quiet to ride and drive.

"A receipt including merely the word 'warranted,' extends only to soundness,—' warranted sound' extends no further; the age, freedom from vice, and quietness to ride and drive, should be specially named. This warranty extends to every cause of unsoundness that can be detected, or that lurks in the constitution at the time of sale, and to every victous habit which the animal has hitherto shown. To establish a breach of the warranty, and to be enabled to return the horse or recover the price, the purchaser must prove that it was unsound or victously disposed at the lime of sale. In case of cough, the horse must prove that it was unsound or victously disposed at the lime of sale. In case of cough, the horse must have been heard to cough previous to the purchase, or as he was led home, or as soon as he had entered the stables of the purchaser. Coughing, even on the following morning, will not be sufficient; for it is possible that he might have caught cold by change of stabling." "The warranty should be given at the time of sale. A warranty, or a promise to warrant the horse, given at any period antecedent to the sale, is invalid." "A warranty after the sale is invalid, for it is given without any legal consideration. In order to complete the purchase, there must be a transfer of the animal, or a memorandum of agreement, or the payment of earnest-money; the least sum will suffice for earnest. No verbal promise to wome the complete the purchase, there must be a transfer of the animal, or a memorandum of agreement, or the payment of earnest-money; the least sum will suffice for earnest. No verbal promise to you or to sail is binding without one of these." "Where there is no warra

Assessed Taxes on Hors's & Mules in Britain.— Horses for riding, or drawing carriages.

Back Horse. £ 8. 2 19 3 0 3 3 8 3 3 3 3 3 3 3 £ s. 1 8 2 7 2 12 d. 9 0 6 0 d. 9966699 £333333 3 3 4 4 5 6 9330909 15 16 17 18 19 9 10 11 12 13 15 15 2 2 2 2 18

And so on at the same rate for any number	O
such horses. £ s.	d
Race-horses, each	(
Horses let for hire without paving post-	
	9
Horses rode by butchers in their trade.	-
	9
	-
	•
	•
each	
Fremntions Horses used for the nurnoses	~
	such horses. £ s. Race-horses, each

husbandry or by market-gardeners in their

not used for drawing any carriage chargesone with duty. Horse used for the purpose of riding, or of drawing any carriage not chargeable with duty, by any tenant of a farm at a rack-rent under £500 per annum, provided the person claiming the exemption keep only one such horse, and have no income exceeding £100 per annum from any other source.

Horse used for riding by any bailiff, shepherd,

or herdsman, where only one such horse is

husbandry or by market-gardeners in their business.

Farm-horses occasionally used for drawing burdens, or let for drawing, for hire or profit, if not used for drawing any carriage chargeable with duty. Horse used for the purpose of riding, or of drawing any carriage not chargeable with duty, by any clergyman (including dissenters), provided the person claiming the exemption support of the purpose of riding, or of drawing any carriage not chargeable with duty, by any clergyman (including dissenters), provided the person claiming the exemption such burst and have an income, whether arising from his ecclesiastical annum.

annum.

Mares kept for the sole purpose of breeding.

Horses kept by licensed postmasters may be used for husbandry, and for drawing fuel, manure, corn, or fodder, free from duty.

Hobsedealers in London and within the bills of mortality are assessed in payment of an annual duty of £25; and in other parts of Britain, £12:10. Exemptions.—Persons who only sell horses bred by themselves or kept as farming-stock at least 3 months.

at least 3 months.

HORSE-POWER, the dynamical unit employed to express the force of the steam-engine, is estimated at 33,000 avoirdupois pounds weight, raised one foot high in a minute; being a force equal to that which the average strength of a horse was believed capable of exerting. "There have been different estimates as to the real power of horses, and it is now considered that, taking the most advantageous rate for using horse-power, the medium power of that animal is equal to about 22,000 lbs. raised one foot high per minute. However, the other, 33,000 lbs., is taken as the standard, and is what is meant when a horse-power is spoken of. In comparing the power of a steam-engine with that of horses applied to do the same taken as the standard, and is what is meant when a horse-power is spoken of. In comparing the power of a steam-engine with that of horses applied to do the same work, it must be remembered that the engine horse-power is 33,000 lbs. raised one foot per minute, the real horse-power only 22,000 lbs.; and that the engine will work unceasingly for 24 hours, while the horse works at that rate only 8 hours. The engine works three times as long as the horse,—hence, to do the same work in a day as an engine of one horse-power, 4.5 horses would be required. The power of a man may be estimated at 1-5th of the real power of a horse, or 4400 lbs. raised one foot per minute."—(Hugo Reid on the Steam-Engine.)

HORSE-RADISH, the pungent root of the Cochlearia armoracia, a perennial plant, common in moist places. It is used as a condiment, and is besides an article of the materia medica.

plant, common in moist places. It is used as a condiment, and is besides an article of the materia medica.

HOSIERY. This manufacture may be held to date its origin from the introduction of the stocking-frame, the first machine successfully used in England for superseding hand-labour in the manufacture of clothing. It was invented by the Rev. William Lea of St John's College, Cambridge, so early as the year 1589; and though its value and importance were not at first understood, and a considerable time elapsed before its produce superseded the trunk-hose them worn, the impulse which it gave to trade was sensibly felt before the lapse of half a century; and by 1669, there were about 660 frames in Britain, affording employment to 1200 workmen. Successive improvements were afterwards devised: tuck-ribs were invented in 1730, about which time also cotton was first need in the manufacture of stockin 1730, about which time also cotton was first used in the manufacture of stockings; and in 1759, Jedediah Strutt obtained his patent for Derby ribs; but no very considerable improvement was communicated to Lea's invention until lately, when stocking-frames with a rotatory action, and worked by steam-power, were brought into use

The counties of Leicester, Nottingham, and Derby, are the chief seats of the manufacture in this country; in the first, woollen hosiery is the principal branch, in the second, cotton, and in the third, silk. Woollen hose are also made on a considerable scale in Wales, and at Hawick, in Scotland. It is not possible to considerable scale in Wales, and at Hawick, in Scotland. It is not possible to make any comparative estimate of the growth of the hosiery manufacture, but there cannot be a doubt that the home trade has been very greatly increased within the last fifty years. Of the present extent and value of the manufacture, perhaps the best estimate is that made a few years ago by Mr Felkin of Nottingham. This gentleman calculates the value of cotton hosiery annually made at £880,000, that of worsted at £870,000, and that of silk at £241,000. He estimates the number of stockings manufactured yearly at 3.510,000 deeps and in the production of these worsted at £370,000, and that of silk at £241,000. He estimates the number of stockings manufactured yearly at 3,510,000 dozens, and in the production of these there are used 4,534,000 lbs. of raw cotton, value £153,000; 140,000 lbs. of raw silk, value £91,000; and 6,318,000 lbs. of English wool, value £316,000; making the total value of the materials £560,000, which are ultimately converted into the exchangeable value of £1,991,000. The total number of persons employed is 73,000. The fixed and floating capital invested, taking the machines at their working value, may be thus stated: Fixed capital in mills and machinery for preparing worsted, cotton, and silk yarn, £140,000; fixed capital in frames, £245,000; floating capital in spinning, &c. £270,000; floating capital in hosiery, £780,000. Total amount of fixed capital, £385,000; total amount of floating capital, £1,050,000 (Porter's Progress of the Nation, sec. 11. chap. 2. p. 246). In this estimate, however, no allowance is made for the value of the stockings knitted by wires, which, although very much diminished, is still considerable.

Neither the quantity nor the value of the hosiery exported can be stated, as our custom-house returns include with stockings octuon-lace and a variety of articles.

HOY

custom-house returns include with stockings cotton-lace and a variety of articles under the head of "small-wares;" the annual declared value of the whole being about £1,500,000. But there is little reason to believe that of late years it has increased, at least in the cotton department (except perhaps to the colonies), owing increased, at least in the cotton department (except perhaps to the colonies), owing to the arduous competition which our manufacturers have now to sustain in this branch with those of Germany. The principal seat of the German cotton-hosiery is Chemnitz, in Saxony, where stockings and socks are made with Lancashire yarns, at prices which have not only excluded British goods from their markets, but, within these few years, have enabled them even to be entered for consumption in this country, after paying a duty of 20 per cent. The following is a statement of the quantities of cotton stockings and socks of foreign manufacture imported and entered for home consumption in each of the five years to 5th January 1840:—

1835. 1836. 1837. 1838. 1839.

Imported, pairs 209,271 297,253 190,563 396,351 498,297 Entered for consumption, pairs 35,911 37,623 39,630 19,470 38,144

The advantage acquired by the Saxon manufacturers in cotton hesiery arises from the comparatively low rate of wages paid by them, and the greater proportion which the cost of labour bears to the cost of the material in that department of the which the cost of about bears to the cost of the material in that department of the trade than in the others. In cotton-hosiery goods, the cost of labour constitutes from two-thirds to five-sixths of their value, while in woollens it does not exceed two-fifths, and in silk articles the proportion is still smaller. It does not appear probable, therefore, that our manufacturers of woollen and silk hosiery have so

probable, therefore, that our manufacturers of woollen and silk hosiery have so much to apprehend from foreign rivalry as those of cotton.

In Germany, according to Dr Bowring, the hosiery manufacture has grown up spontaneously, without any protection, and is one of those that has made, and is making, most progress in that part of Europe. "I believe," says he, "at this moment, the cotton frames of Saxony are equal, if they do not exceed in number those of this country."—(Report on Import Duties, 1840, p. 64.) \$\frac{1}{2}\$ HOY, a long, low, flat-bottomed vessel, with one or two masts, used for carrying luggage and other articles along shore in smooth water.

HUCKABACK, a coarse hempen or linen fabric, commonly made into towels. HUDSON'S BAY TERRITORY, the lands in North America granted to the Hudson's Bay Company. The boundaries of these lands were never very satisfactorily defined. They were declared to comprehend all districts in which was contained the source of any stream which discharges its waters into Hudson's Bay; but since the union formed between this association and the North-west Company in 1821, it claims a kind of proprietorship over the whole of British America, with the exception of the settled provinces or governments.

in 1821, it claims a kind of proprietorship over the whole of British America, with the exception of the settled provinces or governments. \$\mathbb{S}\$
This territory forms the northern part of the great central plain of N. America. Little precise information has been obtained as to the soil, but a large part of it has a climate so unfriendly to vegetation, that even the hardiest trees are incapable of withstanding its rigour. A great portion of the B. part, however, is covered with woods, and at several places from, copper, lead, coal, and salt have been discovered; but the present wealth of the country consists in the fur-hearing animals, the akins of which form the principal object of traffic. Indeed, the interior must be considered as little better than a hunting-ground, with, perhaps, the exception of a district about the Red River of Lake Winnipeg, which was sold by the Company to Lord Schieft, and is assuming the form of a European settlement. The inhabitants of the coast are chiefly flequimaux, and of the central parts Indian tribes; the whole supposed to amount to about 186,000.

The Huddon's Bay Company, chariered in 1670, and possessing the monopoly of the fur trade in these regions, is now the only survivor of the numerous caclusive bodies to which many branches of British trade were at one time subjected. The supreme direction is vested in a board consisting of a governor, deputy-governor, and seven directors, who hold their sittings in London. A resident governor, appointed by them, has the superintendence of all the settlements and is assisted by local councils, composed of the principal officers in each district, who meet him at central points during his annual tours of inspection. The acting officers consist of chief factors, each of whom has charge of several posts, of principal and secondary traders, and of clerks. The higher offices are filled up according to merit from the inferior ones; so that it is perfectly open for a clerk to rise to the rank of chief-factor. The company have at presen

small station for collecting the produce of the adjacent coast of Labrador, chiefly consisting of oil from the seal and porpoise. Montreal is the centre of the transactions carried on in the Canadas. Lastly, the Company have important stations to the west of the Rocky Mountains, particularly Fort Vancouver on the Columbia, though the territory on that river is a subject of dispute between Britain and the United States. [Fuza.]

The Company's vessels, carrying out the stores to Hudson's Bay, sall from London on the 1st June, so as to arrive about the end of August, when the navigation becomes open. They then deposit their cargoes, which remain in store till the commencement of the ensuing season; when in return they receive furs and other articles which have been brought from the interior, and commence their voyage to England, if possible, before the send of September. The ships employed in the trade of the western territory leave the Thames in November, and sail round Cape Horn. The trade employs 4 or 5 ships yearly. The annual value of the imports from this country is about £55,000; while that of furs and other articles exported varies from about £35,000 to £70,000. HUNDREDWEIGHT, the chief British measure of weight for bulky articles, contains 112 lbs, avoirdupois.

contains 112 lbs. avoirdupois.

HUSBANDAGE, the commission given to a shipshusband, or managing owner.

HYPOTHEC is a lien or security over some piece of property, the custody of which does not pass to the holder of the security, but remains with the proprietor of the article. The term is employed only when the property is moveable. In Sociand, the real security which the landlord has for his rent, over the produce of a farm or the furniture of a house, is called a hypothec. The laws of this country do not give encouragement to a species of security which carries so slight an indication of its existence, and admits so many opportunities for fraud. There can scarcely be said to be any tacit hypothece in existence, with the exception of those just stated, and the only instance in which conventional ones are recognised, are in the case of a scenrity taken over a ship, or over a cargo, for necessaries on a voyage. [BOTTOMRY. RESPONDENTIA.] In France, where these securities admit of being registered, they are more generally acknowledged.

ICE is extensively used for a variety of economical purposes, such as cooling liquors, packing salmon, and as an ingredient in some confections. In warm climates it is prized as a luxury; and in Bengal and other hot countries, artificial climates it is prized as a luxury; and in Bengal and other hot countries, artificial means are regularly used for its manufacture. Of late years, however, the practice has been adopted of shipping it from cold to warm countries. In September 1833, a cargo of solid ice, shipped at Boston, was discharged at Calcutta. The price at which it was offered was 3d. per lb., while the native ice could not be sold under 6d. It was packed in solid masses, within chambers of double planking, with a layer of refuse tan or bark between them; but the Americans expected, by improved methods of packing, to lower the price of future consignments one-half. The whole quantity shipped was 180 tons, of which about 60 wasted on the voyage, and 20 on the passage up the river to Calcutta, and in stowing away. Various other vessels with similar cargoes have since arrived in India. It is also exported from the United States to Brazil and other countries.

other vessels with similar cargoes have since arrived in India. It is also exported from the United States to Brazil and other countries. Stee for the use of the Scheries is to be admitted duty free into Coleraine, Londonderry, and Sligo. Tracs. C., May 10, 1838.

ICELAND, a large volcanic island in the Northern Ocean, between lat. 63° 23' and 66° 33' N., and long. 13° 20' and 24° 31' W. Area, 38,230 square miles. Population 56,000. It is subject to the King of Denmark, by whom a stiftsamtmann or

governor is appointed every five years.

governor is appointed every five years.

The aspect of Iceland is rugged, barren, and highly repulsive,—fire and ice seeming ever conjoined, and yet ever contending for the mastery. "It looks almost like the fragment of some former world that has alone escaped destruction, confirming the opinion which regards it as a portion torn from the bottom of the sea by the expansive energies of fire." Only about one-ninth part is inhabited, the remainder being covered with chains of naked mountains of ice, called jökuls, or with valleys rendered equally desolate by lava and ashes ejected from numerous volcanoes, including the celebrated Hekia. The island, though almost entirely in the temperate zone, approaches in climate nearer to polar lands; trees seldom rise above 10 feet, and very little corn is grown. The main harvest is hay, the rearing of cattle forming, with flahing, the principal occupation of the people. In 1833, according to fir Barrow, the live stock on this island was \$6,000 horses, nearly 40,000 cattle, and \$00,000 sheep. There are no regular trades or manufactures. "Every farmer is his own carpenter and smith, though it not unfrequently happens that the clergyman, by his superior skill, monopolizes the trade of shoeing horses." Stockings and mittens, however, knitted by the women, are largely exported; the other exports consist of wool, skins, drish, oil, salted mutton, elder-down, sulphur, and tallow, the latter being chiefly shipped from the factory of Husavik on the Skialitanda Fford. The imports are rye, pease, barley, salt, brandy, iron, tar, colonial produce, fishing lines, and cables.

The island is divided into four commercial districts;—Reikiavik, Eske Fford, Eyd Fford, and Iss Fford; and ships arriving in one are not allowed to go to another. The trade is mostly carried on by the Danes, though a few British and Norwegian vessels sometimes pay the island a visit. The chief port, and simost only town is Reikiavik, lying on the 8 side of an inlet of the Faxe Fford,

on the S. W. coast; pop. 700. The monies, weights, and measures, are the same as those of Denmark.—(Edin. Cab. Lib., No. XXVIII., Iceland, Greenland, and the Farce Islands.)
ICELAND MOSS, a lichen (Cetraria Islandica) common in the N. of Europe

ICE

ICELAND MOS, a lichen (Cetraria Islandica) common in the N. of Europe and N. America, which yields a nutritive starchy substance, sometimes employed to make bread and gruel. It may be formed into a paste; and from its possessing demulcent qualities, as well as a bitter principle, it is extensively employed in consumption and other diseases, being regarded as a dietetic as well as therapeutic agent. IMPORTATION. [Cusroms Regulations.]

IMPORTATION. [Cusroms Regulations.]

IMPRESSMENT OF SEAMEN. The law on this subject is in a very vague and unsatisfactory state. Parliament has never yet, except incidentally, entered upon this subject, probably from a feeling that any legislation regarding it which did not involve the abolition of the practice would be very unpopular. Hence this formidable exercise of the royal prerogative has no better foundation than vague usage, sanctioned by a few decisions of the courts, and restricted by occasional statutes. There have been many discussions as to the origin of the practice, and its legality has often been called in question. The existence of the power, however, though its extent is very obscure, has been held to be acknowledged by the judgments of the courts, and the restrictive clauses in the statutes. Of the exemptions, which are thus the only branch that can be distinctly laid down, the following is a general statement. 1st, Persons above 55 and under 18, foreigners serving in British merchantmen, and able bodied landsmen who have joined the sea-service and have not been more than two years attached to it (13 Geo. II. c. 17). sea-service and have not been more than two years attached to it (13 Geo. II. c. 17). sea-service and have not been more than two years attached to it (13 Geo. II. c. 17).

2d, For every 50 tons of a ship in the coal-trade, one seaman, nominated by the master and certified by a magistrate. This exemption is annual, from 15th April to 1st January (6 & 7 Wm. III. c. 18, § 19).

3d, Masters of vessels, and others employed in the coast-flahery, according to certain minute provisions in 50 Geo. III. c. 108. 4th, Harpooners, line-managers, and boat-steerers of vessels in the southsea whale-fishery (26 Geo. III. c. 50, § 25).

By 4 Geo. IV. c. 24, § 4, all enrolled apprentices were exempted from serving in the navy. That act was repealed by 5 & 6 Wm. IV. c. 19, which is less distinct in its enactments, and which indeed, though professing to consolidate all the laws of the mercantile navy, contains no exemptions from impressment in direct terms.

in its enactments, and which indeed, though professing to consolidate all the laws of the mercantile navy, contains no exemptions from impressment in direct terms. The act declares (§ 39) that "no parish or voluntary apprentice to the sea-service shall be at liberty to enter into the naval service during the period of his apprenticeship without the consent of his master; but if, nevertheless, he shall voluntarily enter on board any of his Majesty's ships of war, and shall be allowed by his master to continue therein," the master, on intimating his consent, becomes entitled to the apprentice's wages earned up to the period of the expiry of his indenture. There are clauses for authorizing registered mariners to break their agreements for the purpose of entering the navy, and these also are expressed in such terms as if there were no such practice as that of impressment. The whole statute will be found abridged under the head Seamen.

INCH, in long measure, is the _th of the foot. In this country it was anciently

INCH, in long measure, is the task of the foot. In this country it was anciently subdivided into 3 barley-corns, but now more commonly into eighths or tenths. In superficial measure, however, it is divided into 12 lines or parts, each part into 12 seconds, and each second into 12 thirds. These are called duodecimals.

INDIA (BRITISH). Under this head we intend to describe the territories of the

East India Company in Hindostan, and the adjoining regions on the Asiatic continent; noticing generally at the same time, however, the native states in these countries which are under British protection, as well as the few that still remain independent; as our possession (with trifling exceptions in favour of Sinde and some European powers) of the whole coast, from the mouth of the river Indus on the W., to the extremity of the Bay of Bengal on the E., enables us to exercise a sort of commercial dominion over the whole. These regions, comprising, with the foregoing exceptions, all Continental India, may be generally defined as extending from the Himmaleh mountains on the N. to Cape Comorin in the Indian Ocean on the S., and from the Indus on the W. to the Burmese territories on the E.,—the extent and population of the whole being as follows:—

	Area in square miles.	Population.
Presidencies of Bengal, Madras, and Bombay, in- cluding the acquisitions from the Burmese in 1826.	630,000	83,300,000
States under British protection.	550,000	40,000,000
Nepaul, Lahore, and other independent states,	177,000	11,000,000
Tota	1, 1,357,000	134,300,000

^{*} Exclusive of the recent conquests of Scinde and the Punjab.

The Company's Settlements of MALACCA, PENANG, and SINGAPORE, and the Crown Colony of CEYLON, commonly included in British India, are described under their respective heads; while under East India Company will be found an historical,

The Company's Settlements of Malacca, Penang, and Singapora, and the Crown Colony of Carlon, commonly included in British India, are described under their respective heads; while under East Noia Company will be found an historical; respective heads; while under Last India Company will be found an historical; respective heads; and second to the whole world. Its wast plains present the double heavest, the law in the second property of India are distinguished at once by their grandeur and their variety. It is, as it were, an epitome of the whole world. Its wast plains present the double are circled by the fruits and grains of the temperate climate; the upper steeps of the Himmaleh are circled with the wast piece forests of the burning deserts of the torrido sone; the lower heights are enriched by the fruits and grains of the temperate climate; the upper steeps of the Himmaleh are circled with the wast plain and company of the second property of the property of the Himmaleh are controlled in the second property and the India, and reaching in point of latitude from the great chain of the Brainmapotors and the India, and reaching in point of latitude from the great chain of the Brainmapotors and the India, and reaching in point of latitude from the great chain of the Sunhar Pentinsala. It thus possessa a length of about 1500 miles, with an averaged virter of China, it may be considered the finest and most fertile on the face of the earth of the property of China, it may be considered the finest and most fertile on the face of the earth of the property of the grain and the second property through it is continually withening stream, which, during the rainy season, cover a great can be considered to the second property of the grain and an almost unrivalled power of regetation, and makes it one entire field of waving grain. Bahar, turther up the current, has the same general aspect, though its surface, and prope

comprising the main body of Southern India. The south-western tract—the original seat of Mahratta power—forms a hilly country; but the central region, composing the once powerful kingdom of Golconda and Bejapore, comprehends extensive fertile plains, secured by their elevation from the scorching heats which afflict the territory along the coast. The extreme southern district, called the Carnatic, is divided into two table-lands, the Ballaghaut and the Mysore, considerably higher than those of the Deccan, and on that account including a greater variety of climate, soil, and production.

Of the rivers, the largest have their source in the great northern chain of the Hismanaleh; and the rest, with few acceptions, in the table-land of Central and Southern India, which is supported by the Ghanta. The following are the chief rivers of India and of the countries which border upon it, with their computed length of course. In Northern India, the Indus and its largest tributary, making together 2000 miles; the Ganges, 1500; the Brahmapootra, 1600; the Jumna, 780; the Ganaduck, 480; the Cost, 300; the Gogra, 300; the Brahmapootra, 1600; the Jumna, 780; the Ganaduck, 480; the Cost, 300; the Gogra, 300; the Gondock, 480; the Cost, 300; the Beatwa, 300; and the Chumbul, 500. In Southern India there are the Taptez, 460; the Nerbudda, 700; the Mahd, 380; the Saubermutty, 300; the Gloavery, 380; the Kistna, 700; and the Cavery, 700;

Betwa, 300; and the Chumbul, 200. In Southern India there are the Taptee, 460; the Nerbuilda, 700; the Mahé, 200; the Saubermutty, 200; the Godavery, 800; the Kistna, 700; and the Cavery, 700.

The Citenate of India, though for the greater part situated nearer the equator, is not so hot as that of Arabia or the adjacent countries. The course of the seasons is also more regular and constant, being mostly regulated by those periodical winds called Movaoova. The south-west monsoon,—the rainy season,—commences with thunder and tempetat in Southern India in May or the beginning of June, but later as we advance towards the north; in July the rains are at their monsoon. This monsoon is attended with dry weather throughout the Peninsula, excepting so its eastern side, on the coast of Coromandel: on this coast it brings the periodical rains, which last till the middle of December,—beat and drought on the other hand prevailing here from June to October; from December to the end of February, the north-east monsoon continues, but is now every where a dry wind, producing cool and agreeable weather. The north-east winds cease about the beginning of March, from which time to the beginning of June the winds are frequier and the heat great all over the peninsula. The winds are chiefly from the south at this time in the Bay of Bengai and on its shores, and are bot, most, and relaxing. In general, the healthy season during the period of the rains and a short time after their termination.

The Inhabitants of India, although prominently distinguished from those of other parts of the world, are scarcely less varied among themselves than their soul and climate. The most numerous are those who speak Hudocistance,—a dialect formed on the basis of an ancient Hudocistance, and the world, are scarcely less varied among themselves than their soul and climate. The most numerous are the whole of the Ganges, and their number is about 31,000,000. The Bengalesa, inhabiting the del a of the Ganges, are formed by the addition of Norman-French to

number have enough only to cover their nakedness,—the male sex a single clout, and the female sex two.

The Productions of the Soil, for the most part, and especially those introduced into the European market, beer a very low value, compared to the same articles raised in the southern and tropical regions of America. This unfavourable distinction appears to arise less from any defect in the land, or even in the species of products, than from the imperfect culture, and the abovanly manner in which they are prepared. Rice is the food of every class except the lowest, and its production, generally speaking, is only limited by the means of irrigation, which is essential to its growth. The ground is prepared in March and April; the seed is sown in May; and the produce reaped in August. If circumstances are favourable there are other harvests,—one between July and Nowember, another between January and April; consisting sometimes of rice, but more commonly of other grain, pulse, or cotton. In the higher territories, sloping upward to the Himmalch, wheat and barley prevail. Holcus or millet is also largely cultivated on inferior lands, and as an intermediate crop; and this with pulse, to which are added even vetches, wild roots, and herbs, constitutes the chief food of the labouring class. In Guzerat some species of holcus are raised to a considerable extent. But now the chief commercial product of India is optum,—an article produced almost exclusively in the central dictricts, especially Bahar, Benares, Patna, and Malva, a full account of which will be found elsewhere. [Optum]. Cotton is also an article of great importance, being used for the clothing of a large proportion of the people. That of Dacca, selected for its mulling, is the finest in India, and perhaps in the world; but it is limited to a range about forty miles long and three broad, along the banks of the river Brahmapootra. Attempts were made to spread it by distributing plants in other districts, but without success.

erops are raised in the Doah and others of the upper Gangetie provinces, from which Bengal is almost emirely supplied; but the best qualities are found in the Nagpore district, and in the vicinity of Surat and Sombay. These, however, have continued to be inferior to the American, as they are readered aimost unmarketable by their foul state, being mingried with dirt and exect controlled their efforts, ordering experimental farms to be established, and sending out seeds of the American and Egyptian projects, sho cleaning implements, particularly the American asset in a space of the state of the sta

mountains small horses and even goats are employed. In all the hilly districts porters are still more in use than any description of cattle. The charge for carrying goods by land in the plains averages about 56s. per ton per 100 miles; and, by the Ganges, shout 2s. per ton. Thus the cost of conveying merchandise 100 miles by land in India is equal to more than one-half the cost of conveyance from Calcutta to London; and the rate of freight is three times as much on the Ganges as between London and Calcutta.—(Commerce, Money, and Banking of India,

the cost of conveyance from Calcutta to London; and the rate of freight is three times as much on the Ganges as between London and Calcutta.—(Consurver, Money, and Banking of India, p. 32.)

The source of the internal trade of India is, like all others, the difference in the character of the productive industry of the several countries and districts carrying it on. The principal articles are corn, cotton, oil-giving plants, and sugar, salt, indigo, opium, silk, tobacco, saltpetre, drugs, indea, lime, and timber. By far the greater part of the salt is produced on the coast, or imported landways from foreign countries; it is chiefly paid for in corn. The cotton, sugar, and other articles are paid for either in the tropical productions of the coast, or in foreign commodities, principally consisting of the areca-nut, spiceries; the metals, iron, sinc, tin, copper, and lead; woolens and cottons. Until lately the whole inland trade of British India was subject to transit duties. These have been wisely abolished within the Bengal provinces; and if they are not, ought to be discontinued in our other possessions, where their operation is known to have been still more pernicious. There remain for abolition the monopoly of the manufacture and sale of salt, and of the culture of the poppy, and the preparation and sale of opium,—imposts which yield an annual revenue of about two millions.

The External Trade of India is carried on with the following countries, which are given in the order of their relative importance:—Great Britain, China, Persian and Arabian Gulfs, Eastern Islands and Peninsula, France, United States, other continents nations of Europe than France, Cape of Good Hope and Mauritius, South America, and Australia. An account of the course of trade at the three principal ports is given below; but there are no public documents which afford a comprehensive view of the whole amount of the foreign imports and exports. In the work above referred to, however (p. 39), the quantities and values of the staple articles o

QUANTITIES of the Principal Articles of the Produce and Manufacture of India.

Imported into the United Kingdom from 1834 to 1839.

	1834.	1835.	1836.	1837.	1838.	1839.
Cotton wool	32,990,865	41,429,011	75.949.845	51.532.072	40,217,734	47,172,939
Cotton goodspieces						348,446
Raw silk	1,798,637					1,387,944
Bandanas, &cpieces	375,234					
Indigo	3,616,022		7,222,331	5,721,554		
Lac, sheliac	1,637,518					
Sugarciot.	101.997					
Pepper	7,131,133	2,807,014		4,150,534		
Baltpetrecot.	257.680				234,047	
Ricecwf.	276,968	233,041				
Castor oil	685.457					

The chief other articles are sheep's wool, coffee, ginger, rum, gums, drugs, and skins.

DECLARED VALUE of Articles, the Produce or Manufacture of the United Kingdom,
Exported to the Territories of the East India Company and Ceylon in the same

1 cars.						
	1834.	1835.	1836.	1837.	1838.	1839.
A A .	£	£ 41,502	£	£	£	£
Apparel, &cArms, ammunition	27,646		67,921	50,608	61,945	77,798
Farms, ammunition	29,880	53,769	46,985	54,259	46.062	
Beer, ale		64,381	82,635	82,124	75,544	110,402
Cotton manufactures	959,221	1,368,954	2,020,343	1,558,693	1,805,449	2,314,754
Cotton twist, yarn	315,583	432,821	561,878	602,293	640,205	690,916
Glass wares	77,002	109,702	129,796	100,841	84,209	
Iron, steel	104.340	144,796	134,893	137,294	137,707	
Hardware, cutlery	48,756	60,838	86,671	79,141	60,363	
Brass and copper goods	345,561	316,120	350,292	328,547	303,132	
Machinery	35,992	12,524	7,550	7,402	29.8/9	
Linen manufactures	17,238	21,805	40,481	32,155		
Woollen do	25,697	216,300	324,670	225,679	204,900	
Other articles.	539,604	349,180	431,714	353,939	390.631	491,780
		010,100	401,714	333,333	350,051	351,70
Total	2,578,569	3,192,692	4.285,829	3.612,975	3,876,196	4.748.607

Of the articles not specified the chief are plate, watches and jewellery, books and stationery, earthenware, lead and shot, coals, leather and saddlery, silk-manufactures, and tin-wares.

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The returns for 1840, so far as published, are still more favourable; the declared value of British produce and minufactures exported amounting to no less than £6,023,192; and the imports of cotton-wood to 76,702,396 lbs.: while in 1841 the latter were again increased to 67,463,684 lbs.

The commercial intercourse between Great Britain and Hindostan, though thus considerable, is yet, we believe, of small amount compared to what it is destinated to become. Hitherto, with some of the empire, one and indivisible in respect to rights and interests. The discriminating duties, so long continued upon sugar and rum for the advantage of the West India planters, have been repealed on Bengal and Madras sugar. But they are still maintained upon the sugar produced in other parts of India, and upon tobacco, coffee, and some minor articles; while again, linds is fast of the still and the

TRADE OF THE PRINCIPAL PORTS.

CALCUTTA.

Calcutta, the capital of Bengal, and seat of the supreme government in India, is situated in lat. 22° 34′ N. and long. 83° 17′ E., on the east side of the Hoogley, one of the brunches of the Ganges, about 100 miles from the sea. It extends nearly 4 miles along the river, with an average breadth of 1½ mile. The northern quarter, or the Black Town, inhabited by the native population, consists of narrow, dirty, unpaved streets, chiefly of much lovels; the whole deep, black, and dingy, and offering a complete contrast to the front parts possessed by Europeans. These last generally

^{*} Chiefly consisting of dividends on India stock and debt, pensions to retired officers, claims on account of Queen's troops in India, charges of home establishments, and stores exported.

present handsome detached brick houses, which, being stucceed, have so elegant an appearance that Calcutta is sometimes called "the City of Palaces" and "the Indian Corinth." The stupendous fortification of Fort William is situated about one-fourth of a mile below the town; and the intervening space, called the Esplanade, contains the magnificent residence of the governor-general. Adjoining the esplanade and the river-bank of the city is the "Strand,"—a quay extending between 2 and 3 miles, and contiguous to which there is anchorage for ahips of 600 tons; while Diamond Harbour, about 30 miles below, is sufficiently deep for the largest vessels. The access to the port is intricate, owing to shifting banks of sand and mud; but this disadvantage is outweighed by its ready intercourse, through the Ganges and its tributaries, with the richest and most populous regions of Hindestan, and which, joined to its being the place of chief record of civil and military functionaries, have residered Calcutta the principal commercial emporium of the east.

The external trade of Calcutta is exhibited in a series of tables, originated by Professor Wilson, and, since his departure, continued by Mr Beil. From these have been drawn up the following progressive view of the imports and exports aince the opening of the trade.

Imports.				Exports.			
	1814-15.	1827-28.	1837-38.		1814-15.	1827-28.	1837-58.
	£	£	£		£	£	£
Copper and nails.			294,840	Cotton plecegoods	849,560		69,625
Iron	37.042	61,347	(96.154)	Bilk do		251,890	
lronmongery 5			(10,180	Cotton	456,066	326,286	196,116
Lead	4,531	17,695	18,107	811k	331,271	855,398	465,451
<u>Tin</u>	94,769			Indigo	724,934		1,124,768
Tutenague	80,206			SugarSaltpetre	211,469		
Quicksliver Speiter	12,516	119.574		Grain	19,964 135,956	148,799 246,614	963,286 286,967
Madeira wine	96,150		4 200	Flour		240,014	6,429
Claret	55.660		21,600	Onium	917 650	1.910.680	2,129,238
Port	36,606		4.414	Opium	1	.,2.0,000	12,544
Sherry, Cham-	50,500	,	-,	Ginger	1	2,896	
pagne, &c	l I	41,330	36,996	Borax		1,847	9,859
Spirite	33,940	50,568	18.748	Lac. lake	19,473	85,288	
Malt liquors		36,062	48,009	Shellac, &c Shawis, &c	12,690	22,036	
Woollens	9,941		94,400	Shawis, &c	9,662	6,689	16,758
Cotton piece goods		561,404	632,952	Bengal rum	14,454	840	7.528
Cotton yarn, &c		188,484	512,256	Gunny bags Hides, skins	••••	17,200	
Haberdashery &c.		65,098	50,502	Hides, skins		• • • • •	80,321
Books and Bta-		47,296	40 000	Safflower Linseed		••••	21,841 9,190
tionery Glassware	14,708 28,840		90,000	Bundries	150,615	108,657	
Hardware, outlery,		0,,000	-5,U/U	Re-exports	233,218		324.959
&c		30,747	\$3,731	too oxports	200,210	200,207	024,303
Jewellery		68,620			4.086.272	5.959.710	6,472,907
Paints and oil		37,859		Treasure	15,463		
Groceries, &c	18,058	40,809					
Timber and spars	80,980	36,274			4,101,735	6,400,809	6,504,595
Cordage and coir.							
Tea & China goods							
Pepper and spices							
Coffee		• • • • •	9,628	İ			
Salt	299.062	496,508	134,901 590,836				
Sungrap	200,00Y	480,000	000,830	Ī			1
	1.165.790	2,799,756	9.985.790				
Treasure		1,352,969					
			-,,				
Total	2,942,687	4,152,725	4,009,950				

In these tables we observe a general increase, and likewise remarkable variations respecting particular articles. In the imports, cotton stuffs and yarn have been, the former nearly, the latter wholly, created under the free trade; and they now form by far the most considerable branches. Woollens have varied strikingly. With has been materially diminished, and at the same time a great alteration of taste exhibited. Madeira, formerly the favourite beverage, is now only introduced with the view of being returned to Europe, improved by the climate and voyage. Port, too, and even claret, have been largely superseded by sherry, champagne, and other white wines. Among metals, there has been a steady demand for copper, which is the material used by the natives in making cups and vessels for water. Iron, lead, and tin have much increased. The tutenague of China has been superseded by spelter or xinc, which is cheaper. Timber and cordage fell off during a certain period, owing to the discontinuance of shipbuilding in Calcutta, but the former has materially revived.

In regard to exports, it is impossible not to remark the great diminution in cotton piece goods, which, in the first year, ranked second only to optum. This drug, with indigo, sugar, saltpetre, and lac-dye, have all considerably advanced. The trade in hides did not exist before 1837.

The following table shows the course of business in respect to the countries with which it is conducted, comparing the years 1816-17 and 1837-38. The first has been chosen on account of the interval which had then elapsed after the opening of the trade, during which different nations attempted to establish an intercourse with India, which several of them, however, have been unable to maintain.

	181	8-17.	. 185	7-38.
	Imports.	Exports.	Imports.	Exputs.
Europe.—Britain.	£805,111	£1,380,696	£2,052,833	£2,701,358
Holland	12,192	29,513		
France	13,242	83,299	103,791	201,896
Denmark	583	1,464		
Sweden		• • • • • • • • • • • • • • • • • • • •	****	• • • • •
Spain		70,831	3,993	10,673
Portugal	36,763	463,453	• • • • •	• • • • •
Asia.—Coromandel Coast	62,840	125,049	87,359	115,439
Ceylon	4,518	18,995	8,387	5,030
Malabar Coast	74,515	378,520	170,938	277,122
Maldives, &c	16,873	9,673	13,259	4,733
Red Sea and Persian Gulf	91,479	443,277	85,949	157,387
China	317,038	1,067,896	122,464	2,054,378
Singapore	85,949	149,718	187,039	389,523
Penang and Malacca	•			1
Java and Sumatra	133,436	93,857	1,856	14,714
New Holland	5,962	33,850	2,434	32,665
Pegu	33, 187	15,536	68,150	141,547
Manilla	18,925	125,066	*****	1 2222
A FRICA.—Mauritius	61,049	204,643	2,028	154,905
Bourbon	****	******	13,405	55,670
Cape and St Helena	3,365	84,044	5,951	20,192
America.—South	6,943	169,495	93,639	2,019
North	96,710	599,825	39,321	190,737
	£1,879,600	£5,498,700	£2,985,789	£6,472,907
Treasure	3,819,126	16,900	1,084,161	31,688
Total	£5,698,726	£5,515,600	£4,069,950	£6,504,595

This table, too, suggests some interesting observations. The intercourse with Portugal and Spain, which was at one time very extensive, has entirely ceased. The wines of the former are no longer in fashion, and the activity of British merchants enables them to supply these countries with Indian produce more cheaply than by their own direct navigation. The same appears the case in regard to Holland and the other northern states, except to a small extent with Sweden. France slone, among European powers, holds a considerable and increasing traffic; receiving indice, sattpetre, and lac-dye, and giving her wines with a large balance in money. The trade has also declined with the United States, which produce no commodities suited to the Indian market, and in exchange for the indige and slik can give only buillion or goods procured sewhers. South America, again, has fallen almost to nothing. In respect to China, the imports are small and still diminishing, the exports large and increasing. The latter consist chiefly opium and cotton, in return for which are received tes, ornamental goods, and quicksliver. From the Eastern Islands are imported the gold of Borneo and Sumatra, spices, this, drugs, now almost entirely through Singapore. From Coromandel are obtained chanks, an ornamental shell much used in temples, cottons, and silks; from Malabar, teak-timber, cot for cordage, cowries from the Maldives; from the Arabian and Persian Guifs, almonds, dates, coffee, pearls. These different branches have not increased, but rather diminished; and it is stated that a direct trade has been pened between Britain and many of those places with which intercourse was formerly carried on through Calcutta.

The following are given as the amounts of the imports and exports of subsequent years:—

dom consist principally of British manufactures and metals, the greater part of which, with sugar and other goods, the produce of Bengal and China, are re-exported in small vessels to all the ports on the western side of India, and to the Arabian and Persian Gulfa,—the returns being made in cotton-wool and cloth; timber, oil, and grain from the northern ports of India; from the south, cotton, hemp, coir, timber, pepper, rice, and cocca-nuts; and from the Arabian and Persian Gulfa, raw silk, copper, pearls, gala, coffee, gum-arabic, copal, myrrh, olibanum, bdellium, assafertida, dried fruits, horses, and builton. The exports to Great Britain consist of Persian silk, cotton-wool, spices, gums, and drugs; those to Bengal are timber, cotr, cocca-nuts, andal-wood and cotton.

cotton-wool, spices, gums, and drugs; those to Bengal are timber, cofr. ecoca-mats, amdal-wood and cotton.

The inland trade with Central Asia, owing to the unsettled state of Afghanistan and the heavy duties levied by the Ameers of Sinde at the mouth of the Indus, has hitherto been comparatively trifling, having been conducted by means of a tedious and expensive land-route through Surat. But the recent British conquests in Cabul and Afghanistan, and the navigation of the Indus by steam, will, it is believed, eralong render Bombay the seat of an extensive commerce, not only with these countries, but with the northern regions of Hindostan.

In the year 1835-37, the imports into Bombay amounted to £3,376,790 value in merchandise, and £1,347,837 in treasure; in all, £4,724,557. The commodities were chiefly from—the United Kingdom, £1,334,191; France, £95,585; Malabar, £786,007; China, £40,566; Bengal, £233,810; Arabian and Persian Guifs, £233,010; Cutch and Sinde, £157,209; Penang and eastward, £71,779; Coast of Africa, £34,933; Goa, Diu, and Demann, £3,403; the treasure was brought almost wholly from China. The exports amounted to £5,784,890 in merchandise, and £205,671 in treasure; in all, £5,990,597. Of the former, there were sent to China, £3,366,625; United Kingdom, £1,352,933; Arabian and Persian Guifs, £470,468; Cutch and Sinde, £232,735; Malabar, £190,704; Bengal, £112,678; Penang and eastward, £60,474; Coast of Africa, £90,351; the treasure was sent mostly to Malabar and Coromandel.

The amounts of the imports and exports in subsequent years were as follow:—

1837-38. 1838-39. 1839-40. 1840-41.

Imports ...£4,164,597. £4,778,730. £3,434,466. £5,160,769.

Exports. ... 4,260,416. 4,816,616. 4,045,116. 5,677,316.

Of the imports in 1840-41, £1,946,800 were from Britain,—the increase being chiefly in piece

Of the imports in 1840-41, £1,946,200 were from Britain,—the increase being chiefly in piece

The shipping entered inwards in 1837-38 amounted to 202 vessels, burthen 91,187 tona. tonnage, 87,001 was under British colours, including 38,889 from the United Kingdom.

The shipping entered inwards in 1837-38 amounted to 207 vessels, burthen 21, 187 tona. Of the tonnage, 87,001 was under British colours, including 38,889 from the United Kingdom. 8 MADRAS.

Madras, or Fort St George, situated on the Coromandel coast, in the Bay of Bengal, in lat. 13° 4′ N., and long, 80° 16′ E., is the capital and principal commercial city of Southern India; pop. 463,000. It possesses no harbour, but only an open roadstead, ill adapted for trade, in consequence of the rapid current which runs along the coast, and the violent surf which beats against the shore. This last is so dangerous that ordinary ship boats do not approach beyond the back of the surf, where their lading is transferred to a peculiar kind of Madras boats, which yield to the shock without breaking when thrown upon the beach. The whole of the town is inhabited by natives, except one handsome street in the north-east quarter, which contains the dwellings of Suropeans, though the greater part reside in garden-houses in the suburbs.

The trade of Madras is much less extensive than that of either Calcutta or Bombay. In the tables for the year 183-57, the latest published, the imports in that year are stated to amount to £1,056,233 value in merchandise, and £456,352 in treasure; in all, £1,512,565. The former was chiefly from the United Kingdom, £771,532; Bengal, £200,503; Bombay, £168,135; Pegu, £133,028; Ceylon, £94,216; France, £25,494, and French ports in India, £33,672; Travancore, £33,471; Tranquebar, £25,700; China, £17,470; Penang and eastward, £23,739: the treasure was chiefly to Bombay, £766,214; United Kingdom, £771,670; China, £27,003; Ceylon, £183,533; Bencal, £110,207; Arabian and Persian Guifs, £117,407; Penang and eastward, £23,630: the treasure was sent chiefly to Bombay, £766,212; United Kingdom, £478,702; China, £27,003; Ceylon, £183,533; Bencal, £110,207; Arabian and Persian Guifs, £117,407; Penang and eastward, £23,630: the treasure was sent chiefly to Bombay, £766,202; China, £27,003; Caylon, £183,630: the treas

MEASURES, WEIGHTS, MONEY, BANKS, DUTIES, &c.

the Company's tables of duties. These weights are as follows.—
8 ruttees = 1 musha = 15 troy grains.
12 mushas = 1 tola = 180 troy grains.
80 tolas = 1 seer = 2½ lbs. troy, or (2*057 lbs.) nearly 2 lbs. 14% drams avoirdupois.
40 seers = 1 maund = 100 lbs. troy, or 82% lbs.

avoirdupois.

The maund of 80 tolas to the seer is thus al-

The manud of 80 tolas to the seer is thus almost exactly equal to the Calcutts bazar manud; in the latter the seer is reckoned at 80 siceas, estimating however each sice at 1792 froy grains. Grain is usually sold by weight throughout India, as also liquids, except at Calcutta, Madras, and Bombay, where wines and spirits are sold by Imperial measure.

The following are the principal local stand-

. Calcutta.—The guz of 2 cubits = 1 Imp. yard; The maund of 8 vis, or 330 pollams, = 25 lbs.

MEASURES, AND WEIGHTS, WONEY, BANKS, DUTIES, &c.

the corge of cloth is 20 pieces; the Bengal common cost or mile = 2000 yards. [Coss.]

These vary greatly in different districts, and the only general standards are the weights derived from the new tols or siccs, of late used in the Company's tables of duties. These weights are as follows:—

8 ruttees = 1 musha = 15 troy grains.
8 ruttees = 1 musha = 15 troy grains.
12 mushas = 1 tola = 180 troy, grains.
12 mushas = 1 tola = 180 troy, grains.
13 mushas = 1 tola = 180 troy, grains.
14 cwt; the baxar maunds, similarly divided, = 32 f. be, avoirdupois; and 3 factory maunds = 32 f. be, avoirdupois; and 5 factory maunds = 11 factory maunds.

Rombew.—The gus = 27 inches.

maunds. 10 oaxar maunds = 11 factory

Bombay.—The guz = 27 inches.

The maund of 40 seers = 28 lbs. avoird.; the candy of 30 maunds = 5 cut; reckoned for grain at 25 Winchester or 24½ Imp. bushels.

At Surat, the candy of 30 maunds, each of 40 seers, = 746½ lbs. avoird.

Baddraz.—The covid = 18½ inches; but the cloth measure is the Imp. yard.

The cawney of 24 maunies = 57,600 sq. feet, or about 1 acre 1 rood 11½ poles.

The garse of 30 parahs, 400 marcals, or 3800 measures = 300,000 cubic inches, or about 16½ Imp. quarters, estimated by weight at 9256½ lbs. avoird.

The maund of 8 vis. or 280 a lbs.

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avoird.; and the candy of 20 maunds = 500 lbs.

mands gradually made for the deposits lodged with them by raising money in every mode, sell-ing at ruinous loss, and mortgaging all descrip-

Palmer & Co				,		£2,600,000
Alexander & Co.						3,440,000
Macintosh & Co.					٠	2,470,000
Ferguson & Co.						3,260,000
Colvin & Co		٠				1,210,000
Cruttenden & Co.	•		•	٠		1,350,000

eredit seed-corn and subsistence till the next harvest, the produce of which goes into the hands of the money-lender. He has usually indeed an account-current against him, which is never fully cleared off; and the interest is charged at the ruinous rate of at least 40 per cent. The issemindars are also obliged to have recourse to them, paying from 24 to 30 per cent. These usurious exactions are accompanied, and indeed cocasioned, by the risk of losing the principal stellar, of the seeds, it is a voided, and a large business carried on, enormous fortunes are accumulated. Several native bankers in Calcutta, Benares, and other large cities, are supposed to be worth nearly a million sterling.

Bengal Presidency.—The general rate of import duty on goods brought in British vessels is 3 per cent. at subcrew, but in foreign vessels. Buillion, precious stones, living once the state of the control of th

Bengal Presidency.—The general rate of import duty on goods brought in British vessels is 3½ per cent.; on marine stores and metals of British or colonial produce or manufacture, in British or colonial produce or manufacture, in British vessels, 3 per cent.; on woollens, do. do. 2 per cent.; coffee in British vessels, 7½ per cent.; tea, wines, liqueurs, and spices, do. 10 per cent.; spirits do. 9 annas per Imp. gallon; builton, precious stones, grain, horses, ice, coal, and English books are free.

The duties are levied on the market

books are ree.

The duties are levied on the market value without deduction; and the whole are returned, awing ½th, if the goods (excepting opium and sait), are re-exported within two years of land-

Calcutta. The general rate of export duty is also, as at Calcutta, 3 per cent. on country articles sent in British vessels, and 6 per cent. when in foreign vessels; on tubacco, 15 rupes per maund of 80 tolus to the seer; cotton-wool exported to Europe or America in British vessels, bullion, precious stones, books, living animals, and opium covered by a pass, free; opium not covered by a pass, free; opium not covered by a pass, prohibited.—(Act of Council, January 3, 1838.)

INDIA (DANISH) is limited to the two petty settlements of Scrampore in

INDIA (DANISH) is limited to the two petty settlements or serampore in Bengal, and Tranquebar on the Coromandel coast.

Serampore is situated on the Hoogiey, 12 miles N. of Calcutta; pop. 13,000. It has little or no trade, but is celebrated as a missionary station, especially of the Baptista.

Trussquebar, a scaport and small territory on the Coromandel coast, is situate at one of the mouths of the Cavery, in lat. 11° 1′ N. long. 79° 38° E., about 145 miles S. from Madras. It was purchased from the Rajah of Tanjore in 1616; pop. 20,000. Accounts are kept in rupees; and the maund weighs 68 lbs. Danish, or 74‡ lbs. avoird.

The trade with these settlements was formerly in the hands of the Danish East India Company,—an arciusive body which was dissolved in 1838. In their hands it was very inconsiderable, but will now probably be increased.

will now probably be increased.

INDIA (DUTCH). [JAVA. EASTERN ISLANDS.]

INDIA (FRENCH), according to Malte-Brun, comprehends Pondicherry and Carical, with their dependencies on the Coromandel coast; Yandon and its dependencies, with the factory of Masulipatam in the Northern Circars; Chandernagore and its territory, with Gorette and some other factories in Bengal; and Mahé, and factories at Calicut and Surat on the western coast. These are almost all inconsiderable and declining places. The principal is Pondicherry, the chief seat of government.

Seat of government.

Pondicherry is situated in lat. 11° 57′ N., long. 79° 54′ E., 85 miles 8. W. of Madras; pop. 40,000. The town is handsome, and, though destitute of a harbour, possesses a tolerable readstead. Trade, however, is dull,—the British fiscal regulations being adverse to intercourse with the interior. Exports, rice, drugs, sugar, indigo, and blue lineas. The money of account is the pageda = 3 rupees = 24 fanams = 5s. 10d. nearly. Grain is sold by the garse of 600 mercals = 104′70 imp. bushels. The maund = 8 vis = 25 lbs. 14 os. 7 drams avoird.; and 20 maunds = 1 candy = 518°05 lbs. avoird. These places have been generally captured by the British during war, and restored on the return of peace. All fortifications are destroyed; and the French are debarred by treatfy from rebuilding them, or of maintaining any force beyond what is necessary for the purposes of police.

INDIA (PORTUGUESE) comprehends Damaun, Diu in Guserat, and Goa; the last having a territory 40 miles in length by 20 in breadth, being the only place of consideration.

Goa, in lat. 15° 29' N., long. 73° 51' E., is situated on an island of the same name, at the mouth of the Mandona, 250 miles S. S. E. of Bombay. It was made by Albuquerque (by whom it was captured in 1510) the capital of the Portuguese possessions in the East; but it is now nearly superseded by New Goa, or Panjim, situated 5 miles distant on the seashors, and possessing one of the best harbours of India; pop. 20,000. This port, though formerly the centre of eastern commerce, has now only an inconsiderable trade with the mother country and the Portuguese settlements in China and Africa. Imports, chiefly piece goods, raw silk, ivory, sugar, woollens, glass, and some other European articles. Exports, hemp, botel-nut, cowries and toys, beads, &c. for Africa.

Accounts in Goa are kept in pardos, each divided into 4 good or 5 had tangas, also into 340 good or 300 had reas; the pardo is equal 2s. 5d. nearly. The candy of 20 maunds = 498 lbs. avoird., estimated in grain at 14 Winchester bushels. The other measures are Portuguese.

INDIA RUBBER. [CAOUTCHOUC.]

INDIGO (Du. Fr. & Ger. Indigo. It. Indaco. Rus. Krutick, Indigo. Sp. Anti), a fine blue dye extracted from various species of Indigofera, principally the I. tincteria, a knotty shrubby plant commonly propagated annually by seed. The indigo plant has been called "the child of the sun;" and a soil of the first The indigo plant has been called "the child of the sun;" and a soil of the first degree of fertility, as well as a hot climate, are required to raise it in perfection. The grounds formed by the alluvial deposits of the tropical rivers have been found by experience the best adapted for the purpose. The dye is extracted from the plant by suffering it to ferment with water; during which it undergoes chemical changes that ultimately cause its deposition in the form of a blue feculent substance, which is collected and dried. Indigo, as met with in commerce, is in square cakes, or cubical masses of a deep blue colour. However carefully prepared, it always contains a considerable amount of impurities, the relative quantity of these being ascertained by its specific gravity, which is light in proportion to its purity. Mr Brande estimates the general amount of colouring matter at only 50 per cent (Chemistry, p. 943). In choosing indigo, the large regular-formed cakes should be preferred, of a fine rich colour, externally free from white mould, and of a clean act shape; when broken, the fracture should be of a bright purple tint, of a compact texture, free from white specks or sand, and when rubbed should have a shining copper-like appearance: it should swim in water, and when burnt by the candle it should fly like dust. This commodity is distinguished according to its difcandle it should fly like dust. This commodity is distinguished according to its dif-

ferent shades of colour. The principal shades are blue, which is the best, violet, and copper colour; and these are again subdivided into fine, good, and midding. The indigo crop is subject to very great vicinsitudes, both of quantity and quality; this leads to corresponding fluctuations of price; and it has been observed that of all the productions that have been made objects of commercial speculation, carried any has been a more fartile corrected by hardward and the control of the correct of the control of the correct of th

that of all the productions that have been made objects of commercial speculation, scarcely any has been a more fertile source of bankruptcies.

The chief localities of the indigo plant at present are Bengal and Guatimala, though of late years the exportation from the latter has been materially checked by the disturbed state of Central America. In the early period of our occupation of India, indigo formed a leading branch of the Company's trade; but the rude manufacture of the native population was, in course of time, expelled from the markets of Europe by the more skilfully prepared drug of America and the West Indias. Soon after the peace of 1733, the West Indian process of manufacture was introduced into Bengal, and the directors having relaxed their prohibitory system so far as to permit the application of British capital and skill to the cultivation of the plant on the alluvial depositions of the Ganges, the exportations were gradually increased, and the American and West Indian article almost entirely driven from the market. The manufacture was also introduced into Oude and the other north-western districts of the great Gangetic plain; and in later periods into some north-western districts of the great Gangetic plain; and in later periods into some of the Madras provinces,—into Java, and into the Philippine Islands. The indigo produced every where else is, however, very secondary both in quantity and quality to that of Bengal and Bahar, the soil and climate of which seem to be peculiarly to that of Bengal and Bahar, the soil and climate of which seem to be peouliarly congenial to the plant. The average annual supply and consumption of indigo at present may be estimated as follows:—Supply: Bengal provinces, 34,500 chests, equal nearly 120,000 maunds, or 9,000,000 lbs.; other countries, including Madras and Guatimala, 8500 chests; total, 43,000 chests. Of this there is consumed in the United Kingdom 11,500 chests, or about 3,000,000 lbs.; France, 8000 chests; Germany and rest of Europe, 13,500 do.; Persia, 3500 do.; Indied States, 2000 do.; other countries, 2000 do.; total, 43,000 chests, or upwards of 11,000,000 lbs. The consumption of late years has not increased in a ratic corresponding to the expansion of manufactures,—a circumstance which seems to be attributable partly to the less common use of blue cloth, and partly, perhaps, to the introduction of cheap substitutes suggested by the advanced state of chemical knowledge. The quantity imported into the United Kingdom was, in 1820, 5,089,292 lbs.; in 1825, 6,793,531 lbs.; in 1830, 8,216,440 lbs.; in 1835, 4,168,395 lbs. In 1840, the imports amounted to 5,831,269 lbs., and the quantity entered for home consumption, 3,011,990 lbs. Upwards of 4-5ths of the imports are from the East Indies; the remainder chiefly from the West Indies, Guatimala, Peru, and the Philippine Islands. The surplus imported beyond the quantity consumed is re-exported to Germany, Russia, Italy, Holland, and other parts of the continent of Europe. France and the United States derive their main supplies by direct importation from Calcutts.

from Calcutta

The following shows the prices in bond of the different kinds of indigo in the London market according to Prince's Price Current of September 17, 1841.

Guatimala & Caraccas s.	d		8.	đ.	. s. d. s.	. d	۷.
Floras	9	to	7	0	Bengal ordin.violet and copper 10.5 6 to 5	9	
Sabres	3		6	6	Onde good and fine 4 6 5	- 6	
Cortes					Low and middling	3	
Bengal fine blue	7 9	٠	8	3	Madras good and fine violet and		
Fine purple and violet 8	3		9	0	blue	3	
Good do					Ordinary & middling do 1 10 5	0	
Middling					Javanone.		
Copper fine	6		. 7	9	Manilla good & finenone.		
Good and middling	10	٠.	7	3	Ordinary and middling 9 4	9	

The American indigo is generally enclosed in sacks of coarse linen sewed into an

The American indigo is generally enclosed in saces of coarse lines sewed into an ox hide, a kind of package which is called a seron, and contains usually about 250 lbs. The East Indian is in cheets of about 35 factory maunds, or 260 lbs. S INDORSATION: INDORSER. Indorsation is the assigning of a negotiable document, such as a bill of exchange or promissory note, by a writing on the back. The person who assigns is called the Indorser, the person in whose favour the assignation is made, the indorsee. Indorsement, in its full and common acceptation, conveys to the indorsee all the rights previously existing in the indorser, with the addition of a claim against the indorser himself. To enable this to be accomplished, however, with an Evalish at Ligh kill these must be worth intimating an intention nation is made, the indorsee. Indorsement, in its full and common acceptation, conveys to the indorseer, but the rights previously existing in the indorser, with the addition of a claim against the indorser himself. To enable this to be accomplished, however, with an English or Irish bill, there must be words intimating an intention on the part of the acceptor to pay to any bearer, or to any person holding right through the original payee, such as, "or order," "or bearer," otherwise the bill is a mere chose in action [Chose in Action], and the indorsement does not convey a right against the maker, but merely a claim on the indorse. It is held, however, that negotiable words omitted by mistake may be supplied (Chitty, p. 219). In Scotland, every bill or note is negotiable, unless it bear a special restriction. A bill payable simply "to bearer" is transferable without indorsement; but the person who delivers it does not by such act become a party. By 17 Geo. III. o. 30, bills and notes for sums of 20s. and unwards, but under £5, can, in England, only be indorsed before the time of payment, and must bear date at, and not before, the time of making thereof, and must be attested by a subscribing witness.

There is no form of words necessary for an indorsement,—the mere signature of the payee, called a blank indorsement, is a sufficient transference to the bearer. An indorsement with the name of the indorsee, and instructions to pay to him, is an indorsement in full. If a bill is once indorsed blank, it is assignable by delivery, notwithstanding posterior indorsements in full, unless they be restrictive. A restrictive indorsement may restrain the negotiability of a bill. "Pay to A B only or "Pay to A B or my use," are forms of restrictive indorsements. Others may be conditionally restrictive, so as to prohibit negotiability until the condition is purified, as "Pay the contents to A B on my being gazetted ensign, before the day of ." An indorsement may be qualified so as to bar the responsibility of the indorser, and

with more or less suspicion. A bill paid by the party originally liable ceases to be negotiable; but not so a bill paid by an indorser. Where the illegality of the original transaction makes a bill or note void, an indorsee, however onerous, can-not recover from the original drawee, but the indorser is liable to him, both on the bill and for the original debt. An indorser on whom recourse is intended to be had, must receive notice of non-acceptance or non-payment; and though, as between the drawer and drawee, notice may be rendered unnecessary from want of value, this will not affect the indorser's right to notice. (Bailey on B., 120-170. Chitty on B., 218-297. Thomson on B., 250-308.)

INGOT, a mass of metal.

INK (Fr. Encre. Ger. Dinte) is composed of different ingredients, according to

the purposes to which it is to be applied. Printing Ink is a black paint, which, from its drying nature, adheres readily to moist paper. It is chiefly composed of nut or linseed oil, which is ignited when in a boiling state, and suffered to burn nut or linseed oil, which is ignited when in a boiling state, and suffered to burn until it has acquired the necessary drying quality; after which it is mixed with lamp-black when black ink is required, and vermilion when it is wanted of a red colour. Writing Ink is either black, red, or blue. The best black is made by boiling Aleppo galls in water, and then adding sulphate of iron,—the precipitate from these being kept suspended by gum-arabic: the proportions in general use are 2 of galls to 1 of sulphate of iron and 1 of gum-arabic; that of water is commonly 1 gallon to 1 lb. of galls. Logwood is sometimes used instead of galls for a cheap ink, but it does not yield a permanent colour. Red ink is made by boiling praxil-wood in weak vinegar, and adding alum. Blue ink is manufactured from the ferro-prussiate of potash and oxide of iron. India, or China Ink, employed in drawing, consists of fine lamp-black mixed with gum-water or fine size. The writing inks anciently in use appear to have been all of this kind. Marking Ink, for linen, is generally a solution of nitrate of silver, which is written upon the fabric after it has been impregnated with an alkaline solution, as carbonate of soda. The inks in which lamp-black is the colouring matter will be always the most durable; but the common ink possesses the advantage of flowing easily from the pen. The manufacture of printing ink is chiefly confined to London; that of writing ink is more widely distributed. All kinds are exported, but the whole amount is inconsiderable. is inconsiderable.

INKLE, a kind of broad linen tape made at Manchester.
INNS AND INNKEEPERS. The only department under this head, coming within the limits of the present work, is the law in relation to the liability of inukeepers for the property of travellers coming under their roof. An innkeeper, by keepers for the property of travellers coming under their roof. An innkeeper, by adopting his trade, comes under a contract of insurance with each guest he receives, becoming liable to indemnify him for property lost, without reference to the manner in which the loss has been occasioned,—provided it have not originated in the guest's own carelessness or misconduct. If loss be occasioned by the guest's own companion or servant introduced by him to the inn, the loss is his own. The responsibility is placed on the same principle as that of carriers, and is in almost all respects the same, with the difference that it has not been yet limited by statute. [Carriers.] How far the innkeeper can limit his responsibility by warning given to the guest, is a doubtful point. It is held that the law being fixed, the guest entering an inn under the assurance of its protection, cannot be deprived of it against his will by any warning or intimation which the landlord may choose to give (Dailon's Justice, 183): but if the guest acquiesce by taking the goods under give (Dallon's Justice, 133): but if the guest acquiesce by taking the goods under his own special charge, the responsibility is removed (Burgess v. Clements, 4 M. & Sel. 310). There is considerable nicety as to the extent to which the guest is bound to see his property put in the right place, or deposited with the right person.

if Sel. 310). There is considerable nicety as to the extent to which the guest is bound to see his property put in the right place, or deposited with the right person. He who leaves valuable goods in a courtyard or passage, without drawing attention to them, will have no recourse: on the other hand, where it was the rule of the house to deposit the guests' goods in their bedrooms, and a traveller directed his luggage to be taken to the commercial room, where it was stolen, the landlord was found responsible. It appears that he would not have been so, however, had he expressly declined to take charge of the goods unless they were deposited in the bedroom.—(Richmond v. Smith, 2 Mann. & Ryl. 235.)

It is a farther obligation on an innkeeper, that he must receive every guest who offers himself, until his establishment is filled. He is not bound, however, to give credit, and before submitting to this his obligation to the public, he may require reasonable remuneration to be first tendered.—(Chitty's Burn's Justice. Alchouse, xvi. Siv E. L. Tomkin's L. Dictionary, vooe Inns.)

INSOLVENCY, in its most simple and extensive meaning, denotes a man's inability to meet his debts. It is applied only to a person who is not under the operation of the bankrupt statutes, whether from his not belonging to the class of trading persons to whom the acts apply, or from that method of disposing of the estate not having been adopted by the creditors. Every bankrupt must necessarily, however, be an insolvent. In Sootland, the former expression is applied to all persons, whether tradesmen or not, who have shown certain public symptoms of inability to pay the debts demanded of them; and these indications, to constitute this species of bankruptcy, must always be accompanied by insolvency. In England and Ireland, the term insolvent is now technically used with reference to such persons as are taking advantage of, or subjected to the operation of the insolvency acts, which provide a sort of bankruptcy system for those debtors who do not com

within the operation of the traders' bankruptcy statutes. In Scotland, the name

within the operation of the traders' bankruptcy statutes. In Scotland, the name by which the equivalent process is known is cessis bonorum; and the term insolvent is not there technically applied to a debtor undergoing this process. [CESSIO.] There have been three separate means of relief open to imprisoned debtors in England, viz. the lords' act, the small debtors' act, and the general insolvent debtors' act. The first of these, which was partly suspended by the earlier insolvent acts, and partly in disuse, is entirely abrogated by the last insolvent act (1 & 2 Vict. c. 110, § 119). The small debtors' act, 48 Geo. III. c. 123, provided for the release of those who have been 12 months in prison, on debts not exceeding £20; but by the latest insolvent act this also has been virtually superseded.

A separate court for the relief of insolvent debtors was first constituted by Lord

A separate court for the retire of insolvent debtors was new constituted by Lora Redesdale's act, 53 Geo. III. c. 102, and was continued by four acts of the reign of George IV., the last of which, 7 Geo. IV. c. 57, was the existing statute down to the passing of Sir John Campbell's act, commonly called the Act for abolishing Arrests in Mesne Process (1 & 2 Vict. c. 110), by which the insolvency system was improved. The court consists of a chief and three ordinary commissioners, and is a court of record, with full powers for enforcing its jurisdiction. An individual improved. The court consists of a chief and three ordinary commissioners, and is a court of record, with full powers for enforcing its jurisdiction. An individual commissioner may hold a plenary court; and there are arrangements in the act for enabling the commissioners to hold circuit courts. The act has two objects in view: in the first place, the protection of debtors from oppressive imprisonment; in the second, the affording a summary process to creditors for distributing the available property of a debtor. When a debtor applies for the benefit of the act, he must be within the walls of a prison. The act may be taken advantage of by the creditors of an insolvent, on his remaining 21 days in prison without satisfying the debt for which he was imprisoned. In either case, the operation of the act is applied for by summary petition to the court. The result is, an order vesting in the provisional assignee the whole property of the insolvent, real and personal, existing or contingent, with the exception of apparel, bedding, and other necessaries, and workmen's tools, not exceeding, on the whole, £20 in value. There are specific provisions for the vesting and disposal of the several kinds of property, and exceptional provisions for adjustment in the case of public officers, clergymen, and others. The creditors have a partial control in the disposal of property. There are arrangements for the examination of the insolvent, and for making the necessary investigations into the amount of his property, the circumstances out of which his involvements have arisen, and such like. After the examinations are over, the debtor is to be discharged, either forthwith, or at such a time that his imprisonment shall not, on the whole, exceed six months, computed from the overing the estate in the assignee, unless there be special reason for punishing him by a longer imprisonment. In certain cases of frand connected with the proceedings on the petition, the court may adjudge the confinement to continue for such a period as that for t by a longer imprisonment. In certain cases of fraud connected with the proceedings on the petition, the court may adjudge the confinement to continue for such a period as shall not make it on the whole exceed three years (§ 77). In certain cases enumerated in the act, where the circumstances connected with the insolvent's embarrassments show fraud or gross recklessness, the imprisonment may, in like manner, be continued for two years. The result of a discharge is, that the debtor is relieved from execution and imprisonment for the debts to which the discharge applies.

In Irreland, the system for the relief of insolvent debtors was adjusted on the model of the English act by 3 & 4 Vict. c. 107. The amount to which the debtor's wearing annarel, bedding and tools, are there privileged is £15.

wearing apparel, bedding and tools, are there privileged, is £15.

INSURANCE, in its legal definition, is a contract of indemnity, one party engaging to make good to another the pecuniary loss that may be, or may be pre-sumed to be occasioned by any future or contingent event, in consideration of a sum certain received or promised. The most obvious subjects of insurance are those which can be measured by a pecuniary value, and to this fair estimate of loss, insurances by individuals on their own lives is the only exception; a case in which no mischief can arise from the insured valuing his life at the sum for which which no mischief can arise from the insured valuing his life at the sum for which he can pay the premium of insurance. In this contract, the person who insures is called the Insurer, and technically the Underwriter, from his writing his name (in marine insurances) under the sum he will stand good for. The party obtaining the insurance is called the Insured, or the Assured, and the deed by which the insurer becomes bound is called a Policy of Insurance.

The principle of insurance is that of equalizing the accidents of life or fortune, by many joining together and consenting that all shall bear the average lot of the whole; or, what is the same, of reducing to each individual, in every case, his possibility of loss down to the average loss of a great number of individuals or cases. "Though based upon self-interest," says Professor De Morgan, "yet it is the most

enlightened and benevolent form which the projects of self-interest ever took. It is, in fact, in a limited sense, and a practicable method, the agreement of a community to consider the goods of its individual members as common. It is an agreement that to consider the goods of its individual members as common. It is an agreement that those whose fortune it shall be to have more than average success, shall resign the overplus in favour of those who have less. And though as yet it has only been applied to the reparation of the evils arising from storm, fire, premature death, disease, and old age, yet there is no placing a limit to the extensions which its application might receive, if the public were fully aware of its principles, and of the safety with which they may be put in practice."—(Essay on Probabilities. Preface, p. xv.) In this part of the work we shall consider the three great divisions of the contract, namely, Fire, Life, and Marine Insurance; but a variety of other information, directly or collaterally bearing upon the subject, will be found under the heads Angurity, Friendly Society, Interest and Annutries, and Reversions.

INSURANCE (FIRE) is a contract for indemnity against losses by fire within

NUITI, FRIENDLY SOCIETY, INTEREST AND ANNUITIES, and REVERSIONS.

INSURANCE (FIRE) is a contract for indemnity against losses by fire within a limited period. In this country such insurances are made by joint-stock societies, of which two kinds are distinguished: proprietary companies, who insure at their own risk and for their own profit; and mutual or contribution societies, the parties insured with which are members or partners, and participate in the profit or loss. A particular account of the conditions on which insurances are granted may be reselful obtained from any of the offices or their agencies, several of which are loss. A particular account of the conditions on which insurances are granted may be readily obtained from any of the offices, or their agencies, several of which are to be found in every town throughout the kingdom. These conditions are always printed in the policy; and this document usually provides that the office shall pay the loss and damage suffered by the assured, not exceeding the sum fixed, "according to the tenor of the printed conditions hereunto annexed."

Merchants sometimes keep open a floating policy on "goods their own, in trust, or on commission," by which means all the merchandise in their possession, whereever deposited (within the district over which the insurance is made to extend), and the aggregate value of such merchandise in the covered either wholly or in part, according as the aggregate value of such mer-

ever deposited (within the district over which the insurance is made to extend), is covered either wholly or in part, according as the aggregate value of such merchandise shall happen to be under or above the sum insured. A loss under such a policy is settled on the average principle. Thus, if an insurance of £10,000 is effected without specification, and a loss of £20,000 incurred, the merchant would be required to show the total value of the goods held by him. Supposing it to be £20,000, double the amount insured, he would in such case be entitled to recover only £1000, as he must bear his own risk on the £10,000 uninsured.

The "conditions" usually provide that persons insuring at the office must give notice of any other insurance made elsewhere on their behalf on the same subject, and cause such other insurance to be indorsed on their policies. This clause is intro-

cause such other insurance to be indorsed on their policies. This clause is introduced to protect the offices against the fraud of persons attempting to recover more than the loss sustained by them.

more than the loss sustained by them.

No precise account was ever published of the proportion of insured houses upon which claims have arisen. The premiums, therefore, are not computed as in life insurance, from exact data, but, as in marine insurance, simply from a loose general estimate of the risk. The risks are usually divided by British offices into four classes, termed Common, Hazardous, Doubly Hazardous, and Special or Extraordinary. For the first, the annual premium is 1s. 6d. per cent.; for the second, 2s. 6d. for the third 4s. 6d. for the residual premium is 1s. 6d. per cent. 2s. 6d.; for the third, 4s. 6d.; for the special risks the premium varies of course according to the particular circumstances of each case. But a duty is besides payable to government of is. for each policy, and of 3s. per cent. per annum on the sum insured, except in the case of farm-produce, stock, and implements, which are entirely exempted from duty. This advantage to the agricultural interest over other classes of the community was granted by the act 3 and 4 W. IV. c. 23.

other classes of the community was granted by the act 8 and 4 W. IV. c. 23.

Fire insurance is of modern origin, having been little known before the Revolution. Since then the practice has become general throughout this kingdom, and has, besides, been partially introduced into many foreign countries. The number of British offices is at present about sixty. In the year 1840, the amount of duty levied by several of the principal companies, and accounted for by them to government, was as follows:—Sun, £162,109; Phœnix, £133,339; Royal Exchange, £70,154; Norwich Union, £67,665; County, £45,481; West of England, £33,746; Guardian, £33,251; Globe, £32,246; Imperial, £31,263; Alliance, £26,310; Atlas, £25,688; Manchester, £20,681; Scottish Union, £20,553; Union, £19,355; Westminster, £18,659; British, £18,478: And by the other offices, £231,608: Total, £990,786, which, as the duty is 3s. per cent., shows the value of the property

^{*} This was the gross sum; an allowance of 4 or 5 per cent., according to circumstances, is paid to the offices for collecting the duty, which reduces the net revenue drawn by the government from fire insurances in the above year to £944,321.

insured to have been £660,524,000. Adding to this, £54,715,016, the amount on farming-stock, makes the total amount insured in 1840, £715,239,016, a sum which, immense though it be, might be greatly increased, but for the oppressive duty, which on common risks amounts to no less than 200 per cent. on the premium.—
(Par. Papers, 1841: Nos. 173 & 326.)

INS

LAW OF INSURANCE AGAINST FIRE.

This contract is ruled by the same principles which affect marine insurance [see below], so far as these are applicable to the nature of the contract. There have been fewer litigated cases illustrative of the law in this department, but the authorities refer to the cases in marine insurance as precedents. The policy is always an open, not a valued one, there being no abandonment. The contract is generally renewable from year to year, on payment of the premium in advance; and it is usual to stipulate that the policy shall not lapse until after some definite number of days beyond the expiry of the year. By 14 Geo. III.

4. 48, the insured must have an interest in the subject, as proprietor, creditor, agent, or trustee: and it is said that a depositary or holder in pledge might show a sufficient interest, subject to the rules established by the office, which have the effect of stipulations between the parties. No more can be recovered than to the extent of the interest, and so when the same subject is insured at more than one office, each pays rateably. The risk insured against is fire, or ignition. To enable the insured to recover, something must have been actually on fire which ought not to have been on fire; and so the effects of heat radiating from fire in its proper place are not included. The business of sugar-refining was pursued in a building of several stories, to each of which heat was communicated by a chimney passing through the whole building, and at the top of the chimney there was a regulator, kept closed at night to retain the heat, but which ought to be open while the fire was burning. On one occasion it was shut at an improper time, and the building was filled with smoke and sparks which occasioned damage. It was found that the insured had no claim on the policy, though it warranted them "against all the damage which they should suffer by fire" (Austin o. Drewe, 6 Tausnt. 436). If there be ignition, however, though not of the subject insured, the injury occasioned by the event is within the polic

The extent of the insurance must often be interpreted from the general scope of the definition. Where "stock in trade, household furniture, linen, wearing aparel, and plate" were insured, the word "linen" from the context was held to include only household linen, and not linen drapery goods purchased on speculation (Watchorn v. Lanford, 3 Camp. 422). Warranties must be strictly complied with as in marine insurance [Warranty]; and so when there is a scale of risks, and property is insured as of a lower class than that to which it belongs, the policy is void. Some risks generally termed "extraordinary" are not included in the tables of premiums, but must be the subject of special contract. A material misrepresentation will vitiate the contract as in marine insurance. Concealment of a circumstance materially affecting the risk will have the same effect, though it should happen to be the result of mistake and not of fraud; hence, where a fire had taken place in the close vicinity of the property insured, and the fire was apparently extinguished, and persons employed to watch the place, and in the mean time the insurance was negotiated, the circumstance was held one which ought to have been communicated; and the fire breaking out again two days afterwards and burning the premises mentioned in the policy, there was no recovery for the loss (Bufe v. Turner, 6 Taunt. 338). It is a usual condition that "no loss or damage by fire happening by any invasion, foreign enemy, or any military or usurped power whatsoever, will be made good." The term "usurped power" has been held not to apply to a mob, but only to embrace the case of rebellion, where there are armies and military operations, during which the civil laws are silenced. The expression "civil commotion," however, will except all acts of popular violence. There is generally indorsed on the policy the method of claiming for a loss, the period at which the claim may be made, and certain articles of evidence which the claimant must adduce. It is not unfrequently a condi

with some other reputable inhabitants of the parish, not concerned in such loss, importing that they are well acquainted with the character and circumstances of the person insured, and do know or verily believe that he really and by misfortune, without any fraud or evil practice, has sustained by such fire the loss and damage; but till such affidavit and certificate of such insured's loss shall be made and produced, the loss-money shall not be payable" (Ellis, 61, 62). In England, such produced, the loss-money shall not be payable "(Ellis, 61, 62). In England, such as clause has repeatedly been held as a condition precedent, and of the nature of a warranty which must be absolutely complied with before there can be a claim for loss,—the unreasonableness of the refusal to sign the certificate not affecting the question. In Scotland there seems to have been no case on the point. Professor Bell, however, is of opinion (Comm. I. 168) that, though "the want of those compurgators will raise an unfavourable presumption against the insured," yet "it does not seem to be law in Scotland that these are all absolute conditions precedent to

not seem to be law in Scotland that these are all absolute conditions precedent to the recovery of a loss by fire, so as to have the effect of enabling persons hostilely disposed towards the insured to extinguish his claim for loss."—(Park on Insurance, 653-670. Marshall on Insurance, 785-813. Ellis on Fire and Life Insurance.)

INSURANCE (LIFE) or ASSURANCE, a contract for payment of a certain sum, or of an annuity, in the event of the death of a particular person, in consideration of a premium paid at once, or periodically. Assurances are said to be absolute when the sum assured is payable on the death of the party assured; contingent, when the nayment of this sum depends upon some other event as the existence or when the payment of this sum depends upon some other event, as the existence or antecedent death of some other person or persons. They may be also divided into antecedent death of some other person or persons. They may be also divided into temporary assurances, where the sum is payable only in the event of the expiry of the life within a certain limited time; deferred assurances, where it is payable in the event of the expiry of the life after a certain time; and assurances for the whole life, payable on the expiry of the life assured, at whatever time this may happen. Assurances are also effected on joint-lives, under various contingencies; but the greater number are those made on policies for the whole period of a single life in engideration of an equal annual premium. life, in consideration of an equal annual premium.

Utility of Life Assurance.—Life assurance may be made subservient to many purposes. Of these, the principal is enabling persons dependent on their own personal exertions, or whose income ceases at their death, to secure a provision for their surviving dependants; but it is also highly useful in various commercial and legal transactions. Among others, the following may be enumerated:—

Capital laid out in the purchase of annuities depending on a life will acquire permanence by

Capital laid out in the purchase of annuities depending on a life will acquire permanence by assuring such life.

Securities on life interests may, by assurance, be rendered eligible for the purpose of raising loans. Fines may be applied for the renewal of leases, determinable upon the demise of a party or parties. The guardians of a person who, at a certain age, will come into the possession of property, may obtain a security for advances made in the interim, by assuring his life until he shall arrive at the given age. Dependants on the lives of others may, by assuring such lives, be relieved from the anxiety natural to their situation.

A debtor who is unable to satisfy the demands of his creditors immediately, but who may have the means of liquidating the amount in a certain time, should he live so long, may, by the aid of a temporary assurance on his life, offer a satisfactory arrangement; or, should his views fail in discharging his debts in the given time, and he or his creditors continue the assurance, the amount will by that means be realized at his decesse.

Persons having issued post obit bonds may realize their amount at the time they become payable, by assuring the life or lives on whose failure they become due.

Marriage settlements may be effected advantageously through the means of life assurance, particularly where the husband is engaged in trade. For example; if the lady's fortune be £200, one-half may be placed at the gentleman's disposal, and the remaining half be investment, employed in an assurance on the gentleman's life (his age being 25), will realize £3000, the whole amount of the lady. The interest on this investment, employed in an assurance on the gentleman's life (his age being 25), will realize £3000, the whole amount of the lady's fortune, at his decesse, which, with the principal money in the funds added, gives £3000, the lady's original fortune increased by one-half, and independent of whatever the husband may have made of the molety he received.

It is, however, almost impossible to detail the various ramifications of the system, or to limit the extent to which it may be carried in a country such as Great Britain. It encourages all to the moral obligation of exercising forethought and Britain. It encourages all to the moral obligation of exercising forethought and prudence, since through its means these virtues may be successfully practised, and their ultimate reward secured. These are benefits which it confers upon the individual. But the system is likewise highly beneficial to society at large, inasmuch as while the annual premiums are considered as a part of expenditure, they and the accruing interest on them are in truth so much added to the productive capital of the community. It was therefore with much justice that Mr Morgan considered "every assurance made for the purpose of providing for a surviving family, in whatever office it is effected, not only as a private but as a public good."

Assurance Societies.—The assurers in this country are generally public companies

or fices. The oldest of these is the Amicable, chartered in 1706; next, the Royal Exchange, and London Corporation, both in 1720; then the Equitable, in 1762. In 1792, the Westminster was founded; then the Pelican in 1797; and the Globo Exchange, and London Corporation, both in 1720; them the Equitable, in 1762. In 1792, the Westminster was founded; then the Pelican in 1797; and the Globe in 1799. Many other societies have been founded since the commencement of the present century, and their number is at present nearly ninety, which is exclusive of those whose operations are confined to particular professions or trades. The premiums required are adjusted according to the age of the party on whose life the assurance is made. They are lowest on young lives, and increase from year to year as the expectancy of life diminishes. The rates of many of the offices are calculated according to a table of the duration of life, founded on the Northampton bills of mortality; others, according to later tables formed from observations upon the population of Carlisle, and on the mortality found to exist among the government life annuitants. [Interests And Annuitus.] The Northampton tables, principally used by the older offices, show a much higher (or more rapid) mortality than is now found to obtain, and very large profits have in consequence been realized by many establishments, particularly those, such as the Equitable, who have besides reckoned upon money being improvable at only 3 per cent. interest. The younger offices have commonly arranged their scales of premiums upon views more favourable to the continuance of life. Yet even in those cases considerable savings are generally realized, as the mortality prevailing among assured lives is commonly less than that indicated by any of the tables at present in use, owing to improvements in medical science, as well as in the habits of the people since these tables were constructed; while, again, assurance offices have, by the purchase of reversions and otherwise, frequent opportunities of investing their funds at a much higher rate of interest than that at which their premiums are computed.

The annexed table shows in a classified form the annual premiums demanded by nearly all the British offices, and by two f

The annexed table shows in a classified form the annual premiums demanded by nearly all the British offices, and by two foreign offices, for an assurance of £100 on the whole life, after the ages 30, 40, and 50. It also exhibits the precise rates at these ages, according to different tables of mortality, reckening interest at 3 per cent., or the annual premium which, accumulated at the said rate of interest, would exactly amount to £100 at the expiration of life, as shown by these tables.

1. The offices included in the first class are, proprietary, or joint stock companies, with a subscribed or paid-up capital, which assure to a person paying a fixed premium a fixed sum at his death, and divide their profits entirely among their shareholders. This system, therefore, is merely the sale of an insurance to those who are disposed to purchase, at such prices as shall leave a profit to the proprietors.

2. The second class consist of mutual assurance societies, which have no proprietary, but divide all their profits among the assured, after deducting the ex-

2. The second class consist of mutual assurance societies, which have no proprietary, but divide all their profits among the assured, after deducting the expenses of management, and reserving a guarantee fund. The mode of calculating profits, however, and the proportion reserved for a guarantee fund, appear to differ in all. Thus—the Amicable distributes profits equally, share for share, among the representatives of the deceased members, without reference to the time during which the assurance may have continued: the Equitable divides their only among the 5000 members who have been longest assured; the Norwich Union addersors. during which the assurance may have continued: the Equitable divides theirs only among the 5000 members who have been longest assured: the Norwich Union adds septennially the whole of the surplus premiums to the policies in proportion to the sums paid: the Scottish Widows' Fund adds two-thirds of their surplus premiums septennially to the policies, not only retrospectively in regard to the number of premiums paid, but also prespectively in regard to all policies that may emerge before the next stated period of investigation: and the Scottish Provident reserves the surplus entire for those members who survive the period at which their premiums, with recommendated interest around the surplus policies. with accumulated interest, amount to the sums in their policies. These, as well as the other plans, will be found more fully explained in the prospectuses issued by the different offices.

3. The third class, called mixed mutual and proprietary associations, generally divide their profits in a certain proportion betwixt a body of proprietors and the parties assured at stated periods, commonly every five or seven years. The share of the assured is, by many of the offices of this class, as well as of class 2d, either added to the policy, or applied in reducing the annual premiums, in the option of the party. The proportions allowed to the assured by the different offices, in so far as the same have been made public, are as follow:—Five per cent., Westminster; Two-thirds

^{*} The principle acted upon by offices of rejecting had lives might also be supposed to preserve their rate of mortality above the average; but this is counterbalanced by the adverse interests which lead, notwithstanding every precaution, to policies being effected upon many such lives. Hence the utmost vigilance is necessary on the part of offices to keep insured lives up to the ordinate.

Table of the Annual Rates of Premium charged by each British Office at the Ages of 30, 40, and 50, for an Assurance of £100 upon a single Life.

Foun- ded		4	X.	T	38	·	-	Ago 50.		Four-		•	ŝ8.			40.			2 0.	•
	1. Proprietary	£	s. d	£		đ.	£	۵.	d.		3. Missed conti-	£	Ł	d.	£		đ.	£	2.	d.
1840 1805	Companies. Agricultural Albion Argus	2	4 3	2 2	19	11	4	5 7	n		nued. English and Scot- tish Law	0	9	9	3	6	6	4	10	9
1833 1824	Argus	1 1	9 10	9	19 17	9	3	19	30	1840 1819	Equitable (New) European	9 99 9	8	3	3	3 4	5	4	8	6
1840 1803	Farmers	2 2 2 1	4	12	187	10	4	4 10	5 8	1838 1838	tin Law Equitable (New) European Family Eudowm's Freemasons Glasgow Guardian Hope	9	79	5 1	3	3	10 10	44	9	3 11
1797 1720 1824	Argus Asylum Britannia Farmers Globe Pelican Royal Exchange Yorkshire York & London	2 2 2	3 5	33 33 02	8 19	9	4	10	99	1897 1890 1890	Hope	M 04 04	10 13 13	7 5 5	3	77	11 11	4	10 10	8
1834	York & London 2. Mutual Asso-		3 (0 2	17	3	4	0	7	1823 1836 1836	Imperial Law Life Legal & General Life Victuallers	9	13 10 5	5 9 8	3	7 5 1	11 11 3	4	10 10 9	9
1706 1837	ciations.* Amicable Clergy Equitable Hand in Hand	2 I	0	63 43	5 2	0	4 :	16 7	6	1721	Life Assoc. of Scot. London Assurance London Life	3	ıî	ú	0	7		4	w	3 1 0
						11	4	10 1 0	8	1840 1824	London, Edin- burgh, & Dublin Manchester	9	8 10	10 7	3	5	0		10 8	7
1835 1834	minster Metropolitan Mutual	9 9 9 1	9 4	83 93 23	6 6 7	4	4 1	12		1836	Minerva	2	10	7	3	5	0	-	8	6
1835	National Provident Norwich Union	21	0 9	3	6	3	4 :	11	1	1830 1837 1809	National Engow- ment National Loan Fd. North British North of Scotland Palladium Promoter. Protector	9	9	3	3	7 5 6	3	4	18 13 11	7 6 11
1825 1830	Scottish Amicable Scottish Equitable Scottish Provident	2 l 2 l	1 1	1 3 1 3	5 5 14	6	4	8	3 4 7	1836 1797 1896	North of Scotland Palladium Promoter	9	13	8 5	3	19 7	11 8	4	7 10	8
1815	Scottish WidowsF. United Travellers	2 1	î i	13	5	8	4	8	6	1836 1839	Protector. Protestant Dissen- ters.			7 1		š 7				ō
1896	3. Mixed Mutual and Proprietary. Aberdeen		K '	,	10	7	4	R	10	1808	Provident Rock Royal Naval and	3	13	5	3	7 7	li li	4	10 10	8
1839 1838	Active	9 9 1	6 1 3	03 53	7	6 11	4	10	9	1824	Military Scottish Union Standard.	3	9	11	3	7 5	0	4	14 7 8	9
1808 1840	Atlas Australasian	2 1	3	5372	7 15	11	4	10	8	1836	Standard of Eng- land Sun	1	19	7	9	13	5	3	_	8 2
1838 1820	British & Colonial Brit. Commercial	2 2 3	8 1	03 53	57	11	4	10	,7 11	1714	Union United Kingdom	2	13	5	3	7	11	4	10	8 7
1833 1838	Aberdeen Active. Alfred Aliance Aliance Atlas Australasian Benevolent British & Colonial Brit. Commercial British Empire Caledonian City of Glasgow Church of England	20 OF	9 1	93 93	4	6	44	7 8	- 2	F 1 0 90	Universal University Victoria	ю	•	a	12	Æ	R	14	11	6 10
1008	Clarical Madical	_	-	٦	•	٦	•		3	1792	West of England Westminster	1	13	4	3	7	11	4	10	10
1839 1894 1807	&c Commercial Crown Eagle. Economic Edinburgh	2 1	8 II 9 I	43 03	4	7	4	13 8 10	7 11 4		Northampton 3 per cent. Carlisle 3 per cent.	3	13 19	8	3	7 19	11 0			8 5
1893 1893 1839	Economic Edinburgh Edinburgh & Glas- gow	i						9	0	į.	Equitable Expert- ence do Gov. Males do Gov. Females do	3	3	7	8		7	3 4 3	11 1 7	0

of one-fifth, London Assurance and National; One-third, Benevolent and Union; One-half, Australasian, Guardian, Protestant Dissenters, Sun, and Victoria; Two-thirds, Caledonian, City of Glasgow, Crown, Edinburgh and Glasgow, English and Scottish Law, Equitable (New), European, Hope, Imperial, Licensed Victuallers, Manchester, National Endowment, National Loan Fund, North British, Rock, Scottish Union, and United Kingdom; Three-fourths, Active, Economic, Promoter, Protector, and Universal; Four-fifths, Alfred, British and Colonial, Church of England, Eagle, Edinburgh, Family Endowment, Law Life, Legal and General, Minerva, Palladium, Royal Naval and Military, and University; Five-sixths, Commercial;

^{*} Some of these have adopted separate lower scales for temporary and non-participating assurances.

Nine-tenths, North of Scotland; Seventeen-eighteenths, Provident; Whole from participation scale, Aberdeen, British Empire, Freemasons, and London, Edinburgh, and Dublin, London Life, and Life Association of Scotland. But these proportions, it has to be observed, form a very uncertain view of the advantage to the assured, as the companies generally differ in their mode of estimating profile, expense of management, and in the benefits reserved for their shareholders. In this uncertainty, perhaps the safest guides are the statements which are published by some of the offices of the profits actually assigned to the parties assured.

Many of the offices in this class have lower scales, under which the assured remain independent of them, as in class first. In not a few also the rates of remain independent of them, as the less than on these of males.

remain independent of them, as in class first. In not a few also premium on the lives of females are rather less than on those of males.

The selection of an office is sometimes a matter of considerable difficulty; and can seldom indeed be fitly made by persons not conversant with life assurance business. The mutual assurance and proprietary systems have each their advocates. On behalf of the first, it is chiefly argued that the assured have the benefit of all the profit realized; while the proprietary companies state that their arrangement has the advantage of simplicity, that the realization of profit by the assured under the former system is uncertain, and that it entails upon them the responsibility of particular of the losses of the society. Each kind, however, has its advantages, according to the objects of the party wishing to be assured. For family purposes, and ing to the objects of the party wishing to be assured. For family purposes, and especially where the party is young, the mutual associations are generally preferred; while for temporary or "short assurances," and those connected with many kinds of trust and money transactions, a liberal proprietary company is commonly chosen: the mixed associations hold out the advantages of both methods. A prochosen: the mixed associations hold out the advantages of both methods. A proprietary company making no returns will be selected on a joint consideration of its respectability, rate of premium, and of the conditions annexed to its policy. In the case of a mixed office sharing profits, regard will besides be paid to the amount of their returns or bonus. In a mutual society, the rate of premium is by some deemed of minor importance, as the surplus is divided wholly among the assured, and the office may in so far be regarded as his savings bank; but rates creatly in excess lead to a needless sumplified of funds—a condition not vary favourgreatly in excess lead to a needless amplitude of funds,—a condition not very favour-

greatly in excess lead to a needless amplitude of funds,—a condition not very favourable to economical management.

In the division of the surplus premiums or bonuses, the methods followed by the offices seem to be fair, in so far as they make the chance of surplus the same for one member as for another, at least of those who enter at the same age: if there be any thing inequitable, it arises when the premiums, as is sometimes objected to those computed from the Northampton Table, are disproportioned at different ages, so that the surplus is differently levied upon different classes of members. But the high respectability of most or all of the offices using the Northampton Table has led to this alleged inequality being very generally disregarded.

Mode of Effecting Assurance.—The company delivers to the party proposing an assurance a printed form, which, where the assurance is on his own life, he fills up with his name and designation, the place and date of his birth, the sum to be assured, and the duration of the assurance, along with various particulars regarding his health, viz.: whether he has resided abroad, has had smallpox or cowpox, been affected with palsy, apoplexy, fits, convulsions, spitting of blood, consumption; or has been subject to gout, insanity, rupture, or to any other disease tending to shorten life. This is followed by a certificate or declaration, warranting the truth of these particulars, and declaring them to form the basis of the contract. Where the assurance is intended to be on another life than that of the proposer, the same the assurance is intended to be on another life than that of the proposer, the same particulars are furnished, and warranted, with a farther declaration that the proposer has an interest in the life of the other to the full amount to be assured thereon. In both cases, references are besides given to two friends of the party on whom the assurance is made. One of these must generally be the party's usual medical attendant, from whom a very minute declaration is sometimes required, not only on the above particulars regarding the party's health, but also as to his predisposition to disease, and his habits as to activity and temperance. When this is com-

^{*} Every desirable security may be obtained on the mutual principle. The proprietary and mixed companies offer, it is true, the guaranty of a subscribed or paid up capital in addition to the premiums, but it has long been proved, that with proper tables and a fair amount of business at starting, this capital is unnecessary. The only advantage of capital to an office seems to lie in its enabling the directors justifiably to seek for investments on secondary securities, at a high rate of interest; investments which a mutual society must avoid, and which even other offices, especially those on the mixed plan, should shun until a sum sufficient (with future premiums) to meet all claims is set apart in the best securities which the state of society offers.

pleted, the party whose life is to be assured generally makes his appearance before a committee of the directors of the company, or their medical officer, by whom farther inquiries are made; and the result is entered in the company's books according to the company's books according to the company's books according to the company's books according to the company's books according to the company's books according to the company's books according to the company's books according to the company's books according to the company's books according to the company in the company is the company of the company is the company of the company of the company is the company of the company is the company of the company is the company of the company of the company is the company of the company of the company is the company of the company of the company is the company of the company of the company is the company of the company of the company is the company of the company of the company is the company of the company of the company is the company of the company of the company of the company is the company of the company of the company is the company of the company farther inquiries are made; and the result is entered in the company's books accordingly. The declaration, certificates, and other papers, are then laid before the board; and from these documents, and frequently information derived from other sources, their decision is formed, and communicated to the applicant. On payment of the premium a receipt is given, containing the number of the policy, which is them made out agreeably to the declaration, inspected by the board, signed by a certain number of directors, and delivered to the party interested.

If the party over whose life the assurance is made cannot appear before the directors are any one appropriated by them a fine varying from 10s to £1 per cent

directors, or any one appointed by them, a fine varying from 10s. to £1 per cent. on the sum assured is usually charged for non-attendance. A few offices likewise require a small deposit of 2s. 6d. per cent. on lodging the proposal; others 5s. or 10s. per cent. as entry-money. In all cases, however, there is a duty to be paid to government on the policy, which, when the sum is not above £50, is 2s. 6d.; above £50 and not above £100, 5s.; above £100 and under £500, £1; when £500 and under £1000, £2; £1000 and under £3000, £3; £3000 and under £5000, £4; £5000 and upwards, £5. There is thus always an addition to the first year's 25000 and upwards, £5. There is thus always an addition to the first year's premium; but in the policy the premium only is named, as on the regular payment of this sum its existence depends. The time allowed for payment of the periodical premium varies in different offices from 15 days to 3 months after the date it is due; but in most offices the forfeiture of the policy may be prevented by paying a fine of from 10s. to £1 per cent. on the sum assured, within a farther limited time, and giving a warranty that the individual is in good health.

Imited time, and giving a warranty that the individual is in good health.

The consideration for an ordinary assurance is, as already noticed, generally paid in equal annual premiums; but many other plans are held out to suit the convenience of the assured. Thus, it may be paid—in half-yearly or quarterly instalments—according to ascending or descending scales of premiums, or by premiums payable during a limited number of years. Some offices also will accept of one-half of the annual premiums for the first five or seven years, leaving the other half, with interest at 5 per cent., to be paid afterwards, or deducted at death from the amount

assured.

Exceptions are introduced into most policies declaratory of their being void in the following cases:—I. Death beyond the limits of Europe, or at sea, except in passing from one part of the kingdom to another, or to or from the Continent, within certain boundaries,—as betwirt Hamburg and Bordeaux. 2. Entering into naval or military service without the previous consent of the company. 3. Death by suicide. 4. Death by duelling; and 5. Death by the hands of justice. The three last, however, are not understood when the assurance is on another's life; and in some offices, onerous assignees to policies opened by persons on their own lives may be similarly protected, to the extent of their bona fide interest.

Extra Risks are always the subject of special agreement. In this class are comprehended lives above 60, persons going beyond the limits of Europe, and per sons whose lives are on the ground of health, or, from the nature of their employment, not assurable at the common rates of premium. Such risks are taken by many offices; but the assurance of lives avowedly diseased is chiefly confined to the Asylum, the Globe, and a very few others.

The Assignation of the Policy is sanctioned by law; and it may form a security for sums advanced, or become an object of sale. The holder of the policy in these cases pays the future premiums, and his advantage consists in possessing a policy

for sums advanced, or become an object of sale. The holder of the policy in these cases pays the future premiums, and his advantage consists in possessing a policy at a less premium than he must have paid at the present age of the party on whose life the assurance was effected. As the probability of life is continually diminishing, the value of the policy will obviously depend upon the length of time it has endured. Thus, if a policy of £100, originally granted on a life of 25, is exposed to sale when the party attains the age of 60, the purchaser will, according to the subjoined table, have to pay only £2, 2s. 5d. annually during the existence of the policy; whereas, if he had taken out one at the present age of the party, his premium would be £6, 6s. 6d.; and for the excess of the latter above the former, namely, £4, 4s. ld., a price is fixed. The value of a policy may also depend upon the future annual contributions being paid under a guarantee by the assigner, or from a fund set apart by him; or upon the premium having been paid in a gross sum when the policy was opened. In general, however, it may be observed that a policy must be most valuable to the party assured himself, and less so to others, according to their convenience of paying the premiums, and obtaining proper information respecting the party in whose life they are interested. On this account,

and perhaps for the still weightier reason that all who sink capital to be drawn back upon a contingency, stipulate for a much higher than common return of interest (independent of the chances of life), policies are sold at very disproporsionate prices. Most assurance companies are willing to treat for a renunciation of the policy: but where it has been opened for family purposes, and the assured's circumstances become reduced, an endeavour is frequently made, particularly where the policy has endured for a considerable time, to retain it among his friends. Of late years, several offices have adopted the plan of granting loans on the security of their policies.

On the Fernian of the Trian

of their policies.

On the Expiry of the Life Assured the office requires production of certain documents,—such as the register of the burial of the deceased, and references to the medical persons and others who attended him in his last illness; and, if he opened the policy himself, the probate of his will, or, if it has been assigned, a copy of the assignment. The time when the sum assured is paid varies in different offices; but is commonly within three months after proof of the death. In this interval due investigation is made; and every thing having been found satisfactory, the claimant brings with him the policy, and a receipt for the sum, which is immediately paid to him. Where a claim is payable in the event of a person being alive at a certain time, his appearance before the directors, or a person appointed by them, is requisite, or sufficient proof must be given that he was alive at the time defined by the policy.

at the time defined by the policy.

The following, extracted from the tables of the Pelican, a proprietary company, shows the rates payable at different periods of life for assurances under different circumstances :-

0	alm of A f£100 o	Annual n a Sins	rle Life f	as re	ssurance ears, and	SURVIVORSHIPS. Annual Premiums required during the Joint Lives of two Persons A and B, to secure £100 payable at the Death of A, provided B be then living.					
Age.	One Year.	Seven Years.	Whole Life.	Àge.	One Year.	Seven Years.	Whole Life.	Age o		Ageo	Annual Premium
17 18 19	1 7 7	0 19 7 1 0 0 6 1 1 1 6 1 1 2 2 8 1 1 2 3 3 1 1 3 1 1 1 5 3 1 1 5 6 1 1 7 6 1 1 10 0 1 1 11 0 1 1 13 0 1 1 13 0	1 14 3 1 1 15 0 0 1 1 16 18 1 1 17 7 6 1 1 19 5 5 6 7 9 1 1 19 5 5 6 7 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 60	1 13 2 1 14 3 1 15 4 1 16 6 1 17 9 1 19 0 2 1 3 2 4 9 2 6 6 2 10 3 2 14 6 2 16 10 2 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 17 7 1 18 10 2 0 2 2 1 7 2 3 1 2 6 5 2 10 1 2 12 1 2 14 3 2 16 7 2 19 10 3 1 7	3 1 9 7 6 8 7 7 8 3 7 6 8 7 7 8 3 14 1 5 3 18 1 1 7 4 4 4 4 7 3 4 4 10 6 4 10 10 5 5 4 9	15 1. 29. 34. 56. 77. 89. 11. 23. 44. 56. 67. 78. 89. 19. 30. 44. 44. 56. 67. 77. 89. 44. 44. 56. 66. 77. 89. 89. 89. 89. 89. 89. 89. 89. 89. 89	0 1 6 8 1 3 6 1 3 6 1 1 1 1 1 0 0 1 8 9 0 0 17 9 0 1 7 9 0 1 7 9 0 1 8 10 1 6 11 1 6 11 1 6 11 1 6 11 1 6 11 1 7 1 1 1 9 0 1 1 1 9 0 1 1 1 9 0 1 1 1 9 0 1 1 1 1 1 9 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		0 2 16 8 0 2 14 2 0 2 14 2 0 2 7 2 0 2 3 11 0 1 18 9 1 14 4 5 4 1 5 0 3 18 1 5 4 0 7 0 3 18 1 0 3 14 11 0 3 3 14 11 0 3 2 19 8 0 6 0 9 0 6 0 9 0 7 2 1 0 8 2 11 0 9 2 11 0 1 18 9 0 1 14 4 0 3 14 11 0 0 3 18 1 0 0 5 1 6 1 0 0 5 1 6 0 0 5 1 6 0 0 6 0 9 0 7 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

LAW OF INSURANCE ON LIVES.

The principles set forth in relation to the other two great branches of the contract are to be considered as applicable to this branch, in so far as they are not inconsistent with the different circumstances of the transaction. If the policy be not on the life of the insurer himself, he must have some pecuniary interest in the life insured, in terms of 14 Geo. III. c. 48; and no farther sum can be recovered on a loss than to the extent of the interest. "Very few questions," says Mr Ellis, "have arisen upon the subject of interest, because the offices are never in the habit of taking that objection, unless they are under the necessity of resisting payment upon some other fair and proper ground, as fraudulent misrepresentation or concealment; and if they are driven to resist on such a

ground, they then, in order to make their case the stronger, sometimes also object to the want of interest, when the policy is open to the objection" (123). Where a policy of insurance in which there was no such interest as would found a claim in law was sold, an action to recover back the purchase-money was dismissed, as it was shown to be the practice of the office to pay in such cases (Barber v. Morris, 1831. Ellis, 124). A creditor has an insurable interest in his debtor, but if the debt is paid in any manner, the interest ceases, as in the case of Mr Pitt's coschmaker, who, with his other creditors, was paid from a parliamentary grant coachmaker, who, with his other creditors, was paid from a parliamentary grant (Godsal v. Boldero, 9 East. 72). [Policy.] The holder of a note for money won at play has no insurable interest. Having to pay a fine, or as it is called in Scotland, a grassum, as the condition of a lease on the death of any individual, is an ordinary interest.

ordinary insurable interest on his life.

Warranty and representation are of great importance in this species of insur-Warranty and representation are of great importance in this species of insurance. It is usual for the party to sign a specific declaration regarding his age, health, and habits; and if this be part of the policy, its contents are of the nature of warranties. The warranty that the person "is in good health at the time of making the policy" does not infer perfect freedom from disorder. The question is, whether the life is "a good one," which it is if there be nothing that positively reduces the chance of the individual living as long as the average of other people. A person slightly diseased, namely, by occasional rheumatism, may die of an increase of the disorder; but the chances of his doing so are scarcely more than that a man in perfectly sound health may, within the same time, fall a victim to a deadly disease. If there be a fixed consumption, however, or disease of the heart, the seeds of death are planted,—the subject is clearly a damaged one, and though it may hold out ease. If there be a fixed consumption, however, or disease of the heart, the seeds of death are planted,—the subject is clearly a damaged one, and though it may hold out for some time, the chances are against it, and it is far from being worth the same sum with an undamaged commodity. It is now the practice to require some specific answers to certain questions as to the party's health, namely, if he has had the smallpox, or has been inoculated? If he has had the gout? If he is ruptured? and, undoubtedly, false answers to such questions will vitiate the contract. It is the practice to follow up with the question whether there be any disease tending to shorten life? And the answer must be given on the above principles. Where the insurance office demands no warranty or special information, it takes the risk of the life being a good one, subject to the exception of fraud. There may always be fraud in the concealment of material facts. It is held that the person insuring be fraud in the concealment of material facts. It is held that the person insuring is not to be the judge of what is material, and that it will not avail him to prove that he did not think the circumstance material, and, on that account, did not communicate it; so that, whenever there is any thing in the position of the insured, whether as to health or habits, which distinguishes him from the generality of men, it is not safe to omit stating it. "The contrary doctrine," says Mr Justice Bayit is not safe to omit stating it. "The contrary doctrine," says Mr Justice Bayley, "would lead to frequent suppression of information, and it would be extremely difficult to show that the party neglecting to give the information thought it material. But if it be held that all material facts must be disclosed, it will be the interest of the assured to make a full and fair disclosure of all the information within their reach" (Lindenau v. Desborough, Ellis, 114). If the person has been seriously ill recently before the insurance is effected, that circumstance ought to be mentioned, and reference should be made to the physician who attended him. A certificate is generally required from the usual medical attendant, and if, instead of the physician who has been recently attending, one who attended at a distant period tificate is generally required from the usual medical attendant, and if, instead of the physician who has been recently attending, one who attended at a distant period only is adduced, the policy will be vitiated. It is usual to apply for information to a private friend, the truth of whose statements is material to the validity of the policy. In Scotland, in a case where the answer of the private friend to the question "Can you give any and what information respecting his habits! whether active or sedentary! temperate or free!" was, "he takes moderate exercise, and is temperate in his living;" and that to the question "do you know any reason why an assurance on his life would be more than usually hazardous," was, "I know of none:"—the concealment of an excessive habit of onium-eating was held know of none;"—the concealment of an excessive habit of opium-eating was held material (Forbes & Co. agt. Ed. Life Assur. Co., 9th March, 1832, 10 S. & D. 451). A person insuring on the life of another is in all respects in the same situation which that person would be in if insuring on his own life, in respect to concealment, representation, and warranty; and his ignorance of the circumstances does not pro tect him if he give false information, or conceal material facts.—(Park, 636-652. Marshall, 770-784. Ellis on Fire and Life Insurance.)

INSURANCE (MARINE) is insurance against perils of the sea and enemy, including the chances of fire, piracy, and barratry. Its introduction is believed to have been coeval with that extraordinary development of maritime and commercial

enterprise which distinguishes the 15th century. But a long period elapsed before its practice became general; nor was it until after the middle of last century that in this country it was subjected to clearly defined laws,—an advantage which was then conferred upon it mainly by an admirable series of decisions by Lord Mansfield, Chief-justice of the King's Bench between 1756 and 1788. It differs from fire and life insurance both in the mode of transacting the business and in the diversified nature of the risks against which security is sought. The great emporium of marine insurance is London, where it is effected chiefly through means of indiof marine insurance is London, where it is effected chiefly through means of individual underwriters, who congregate at Lloyd's Subscription Rooms, in the Royal Exchange. Indeed, until 1824, with an exception in favour of two chartered associations, the Royal Exchange and London Assurance Companies, it was not lawful in England for any two or more individuals to combine together for taking upon themselves sea-risks; but in that year an act was passed which allowed any number of persons to associate themselves together for undertaking marine insurances; and many joint-stock companies have been since formed and put in action for that purpose, both in London and other ports, though nearly all the great adventures, and a large proportion of the other business, continue to be taken to individual underwriters at Lloyd's.

The establishment of Lloyd's may be regarded as the forms of the maritime can

underwriters at Lloyd's.

The establishment of Lloyd's may be regarded as the focus of the maritime commerce of the world. [Lloyn's.] There is scarcely a scaport of any consequence in which the committee has not an agent, whose duty it is to survey all ships launched, and to continue from time to time to transmit all necessary information about them; also to give intelligence of all departures and arrivals, ships spoken with at sea, wrecks, accidents, and the state of the weather; likewise, in case of damage to goods insured, to examine and report their condition, and generally to watch over the interests of the underwriters. In this way that body of men are supplied with every information which it concerns them to nessess: and as hesides supplied with every information which it concerns them to possess; and as, besides all British ships, a large proportion of those of other states are registered in their books with every minute particular, they have seldom more hesitation in accepting insurance on a foreign vessel than on one of this country.

Merchants and shipowners sometimes transact their own business at Lloyd's,

but more commonly insurances are effected through the medium of brokers, who are remunerated, not by the assured—their employers—but by the underwriters, are remunerated, not by the assured—their employers—but by the underwriters, with whom they have a current account; their regular allowance is 5 per cent. on the amount of the gross premium in each case, and, in addition, 12 per cent. upon the net amount of premiums paid by them at the end of the year, half-year, or other period, when the broker makes a settlement, after deducting all losses and averages recovered for the assured. As some compensation for the 12 per cent., which he foregoes in the case of loss, the broker charges the party assured 10s. per £100 upon the amount recovered. The underwriters seldom run a hazard to any large amount upon one ship; their principle of transacting business is to distribute their risks over as many vessels as they can, so as to lessen the proportionate probability of great loss; and hence few will subscribe more than £500 or £600 on one ship; indeed, the average may be reckined nearer to £200; but the policy is handed round indeed, the average may be reckoned nearer to £200; but the policy is handed round among the underwriters until the required amount is filled up; and thus, when an adequate premium is afforded, no difficulty is experienced in getting assurances to almost an unlimited extent.

Insurances of moderate amount are in general effected with greater facility and despatch with a company,—the risk being commonly accepted or rejected at once by their manager. These companies, as at Lloyd's, all allow 5 per cent discount or brokerage on the premium; but their practice is not uniform in other respects.

The following are the terms of the Marine Insurance Company of London:—"All parties to be allowed 5 per cent. brokerage and 10 per cent. discount for cash. Current credit accounts to be opened with the consent of a board of directors, the same to close on the 31st of December in each year, and the balance to be paid on or before the 5th of April following, when 12 per cent. discount will be allowed upon the balance, such discount to be forfeited if the balance be not then paid."

In some places there are allowed remarked in superpose associations, in which no

In some places there are clubs, or mutual insurance associations, in which no premium is paid, but each member is periodically called upon to defray a proportion of the losses sustained,—the rate of his contribution depending upon the value of the property hazarded by him. These clubs are usually confined to particular branches of trade, as the coal-trade, where the coal-trade independent property are company again decrease. members are commonly equal in degree,—a condition essential to render the association equitable.

The rate of premium varies of course according to the quality of the ship, the

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season of the year, and the nature of the voyage. It is not based, as in life assurance, upon any systematic arrangement of facts, but is deduced, as in fire insurance, merely from a loose general estimate of the risk. For an account of the stamp duties payable, see the head Policy.

In effecting an insurance, merchants should take care that their policy covers not only the full value of their property, but likewise the expenses of insurance and

recovery in case of loss or damage.

LAW OF MARINE INSURANCE.

Parties.—Any individual, whether a British subject or an alien, may insure his interest in a vessel, provided he be not an alien enemy. It has been generally provided by temporary acts during war, that no foreign enemy's interest shall be insured in the United Kingdom, with penalties against underwriters contravening. By common law, however, no alien enemy can recover on a policy during the continuance of hostilities, whether it has been entered into before or after the declaration of war; nor can an action be maintained by any one on an insurance on the property of an alien enemy. A license to trade with this country granted to an alien enemy, does not remove his personal disability to sue in his own name, but it incidentally legalizes an insurance on his goods shipped for the benefit of British subjects, so as to enable his agent here to sue upon it. No insurance can be recovered on, for a loss occasioned by British capture, as was decided where the insurance on a French vessel was made before the war in which she was captured, and action raised after the cessation of hostilities (Gamba v. Le Mesurier, 4 East. 407). It is held, indeed, that losses happenitug during the existence of hostilities between the respective countries of the insured and insurer, must be considered as excluded from the perils in the policy. It is said that British property may lawfully be insured against British capture, seizure, and detention, it being presumed that any loss so occasioned would be caused by mistake. An English subject living under the protection and acting for the benefit of a foreign state, is looked on as an alien enemy in respect of any insurable interest. Mere residence in a hostile territory, however, does not constitute such a disqualification. A neutral, though residing in a hostile territory, and in partnership with an enemy, may insure his share of the interest. The parties who, in this country, are entitled to carry on the business of marine insurers or underwriters, have been already described.

have been already described.

Subject: Interest.—The insured must have an interest in the subject. By 19 Geo. II. c. 37, for the purpose of suppressing wager-policies, it was enacted that no insurance "on any ship belonging to his majesty, or any of his subjects, or any goods, merchandises, or effects, &c." should be made, "interest or no interest, or without farther proof of interest than the policy, or by way of gaming or wagering, or without benefit of salvage to the assurer;" and assurances in contravention of the act are null. There is an exception in favour of British privateers, on which insurances may be made, interest or no interest, free of average, and without benefit of salvage to the insurer; and by § 3, effects coming from places belonging to the crown of Spain or Portugal are excepted. It has been decided that the statute does not extend to foreign property in foreign ships, and therefore a condition that the policy is to be deemed sufficient proof of interest, in case of loss, in such a case is binding, and renders the policy sufficient proof accordingly (Thellusson v. Fletcher, I Doug. 315). In cases where the act requires an interest, if the person insured part with his interest, the insurance falls. The indorsement of a bill of lading to a creditor is held on the face of the transaction a transference, to the effect of terminating an insurance; the parties, however, are entitled to show that their understanding of the transaction was different. An insurable interest does not require to be a direct right of property. Any valuable interest arising from the subject, unless specially excluded (as is the case with seamen's wages) may be insured, e. g. the commission, or privileges, of the captain, and money expended by him for the use of the ship, expected profits, freight, and interest in bottomry and respondentis bonds. An owner may even insure, under the head of freight, the benefit which he derives from carrying his own goods. When freight is insured, it must be shown, before recovery, that bu

unless in the case of the insurer becoming insolvent or bankrupt, or dying, in which case his assignees, executors, or administrators may re-insure, provided it be set forth on the policy that it is a re-insurance. A double insurance is not void, though made with the view of double satisfaction in case of less, but the insured cannot recover on the policies collectively more than his loss. He can either sue on both rateably, or on one, and in the latter case, the underwriters who pay have relief against those in the other policy. As to the subject which forms the interest, "in general it may be laid down as a rule, that no insurance can be made on any species of goods and merchandises intended to be imported or exported, contrary to the laws of this kingdom, or those of its dependencies, or to the law of nations; and that if the intended commerce be contrary to any of these laws, an insurance made to protect it will be illegal and void "(Marshall, 52). When both parties are aware of the illegality,—as in other illegal pactions, neither party has an action against the other for performance of his covenant; and so, though he may have paid the premium, the insured cannot recover on a loss. By the act for consolidating the laws against smuggling, 3 & 4 Wm. IV. c. 53, \$46, there are penalties against the parties engaged in such insurances. [Smuggling.] It is no defence, however, in an action on a policy, that the subject-matter of the insurance has come into existence through an infringement of the revenue law of some other country. If a general insurance be effected on goods, part of which is of a nature to make the voyage illegal, and the ship and cargo liable to be seized in terms of the revenue laws, the policy is entirely vitiated; but, if no part of the cargo but that illegally conveyed is liable to forfeiture, the insurance will be good as to the remainder. Insurance on contraband of war is void, and so on any trade carried on in contravention of a British embarro. [Contraband. remainder. Insurance on contraband of war is void, and so on any trade carried on in contravention of a British embargo. [Contraband. Embargo.]

Risks or Perils.—Perils usually insured against are as follow:—

1st, Of the Seas.—The expression comprehends those injuries or losses which

proceed directly from natural causes, and are not designedly done by the hand of man; it embraces injury from stress of weather, winds and waves, lightning, rocks, man; it embraces injury from stress of weather, winds and waves, lightning, rocks, sandbanks, &c. A loss arising from the misconduct or ignorance of the master or crew is not considered as by a peril of the sea, nor is one from the internal condition of the vessel, as where it becomes worm or rat eaten. It is a peril of the sea when the vessel receives damage by taking the ground in a dry harbour, owing to the tide having left her, or when one ship is run down by another, or when loss is immediately caused by the convulsion of the elements, though remothey occasioned by some act of carelessness. Where a vessel is driven ashore by stress of weather, and there captured, it is not a peril of the sea, but of enemies. Where two of the crew were sent on shore to make fast a rope, and were impressed before they could do so, in consequence of which the ship went ashore nearly at high-water, where she grounded, and was much strained, and made a great deal of water before she could be got off—it was held a loss by peril of the sea.—(Hodgson v. Malcolm, 2. N. R. 336.)

2d, From Fire.—Whether occasioned by the negligence of the master or crew.

2d, From Fire.—Whether occasioned by the negligence of the master or crew, by malicious design, or in furtherance of public policy,—as where a ship is burnt to prevent her from falling into the hands of an enemy. If goods are shipped in a damaged state, and internal combustion arise, the insurers of such goods are not liable.

3d, From Enemies.—The principal losses from this source are by capture. The production of captures and is not entitled to

underwriter becomes liable from the moment of capture, and is not entitled to wait for a formal alienation of the property by condemnation or otherwise; retaining, however, an equitable right in the case of recapture, to have his responsibility reduced to the extent of the actual loss occasioned, as by salvage, &c. The underwriter will not be relieved though he show that a capture was occasioned by writer will not be relieved though he show that a capture was occasioned by connivance with the master. The only manner in which there can be a deduction from the full loss in the case of a captured vessel, is in the case of recapture; the ransoming captured vessels is prohibited under severe penalties (22 Geo. III. c. 25). Detention by embargo is one of the perils from enemies, and it is generally specified in the policy. [Embargo.] There can be no recovery on an insurance against British capture.

Ath, Pirates, Rovers, and Thieves.—This includes all those acts of violence and fraud, which not being done by governments in the course of hostilities, resemble robbery and theft on shore. Where a ship loaded with corn was compelled by stress of weather to enter Ely harbour, where there was a scarcity of corn, and was forced by a mob, it was held a loss by pirates.—(Marshall, 511.)

5th Jettison, and 6th Barratry. See these heads, and Average.

These particulars are usually followed in the policy by the general definition

"all other perils, losses or misfortunes, that have or shall come, to the hurt, detriment, or damage of the saids goods and merchandises, and ship, &c., or any part thereof." This general expression has become limited by practice and law to certain descriptions of loss. The destruction of the ship through any principle of internal decay,—as by worms or rats, is not covered by it. Though loss occasioned by capture be one of the risks specifically insured against, it would appear that loss occasioned where the voyage is abandoned on account of the risk of capture, does not come under the general clause; so it was found in a case where, it having been ascertained that the port of destination of an insured vessel was shut up against the British, the ship proceeded elsewhere, and sold her cargo at a loss (Hadkinson v. Robinson, 3 Bos. & Pul. 388). Where a vessel is fired on by mistake for an enemy, the loss is held to be covered by the general clause. There are some risks excluded from the insurance by what is termed the common memorandum. [Policy.] There are certain injuries to ship and goods which the shipowners must bear, in relation to the former, and indemnify as to the latter, notwithstanding insurance. If the ship was not seaworthy at the commencement of the voyage, they are liable for all loss, as likewise for loss or damage arising from the defect.

The Duration of the risk is a matter of importance. As to goods, if they are insured to be loaded at a particular place, they will not be covered if loaded elsewhere. Under the usual form of policy, the risk does not commence till the goods are actually on board, "and it may be laid down as a general rule, that the risk on goods continues no longer than they are actually on board that the risk on goods continues no longer than they are actually on board that if they be removed from on board and landed, or put on board another ship without the consent of the insurers, the coutract is at an end, and the insurers are discharged from all subsequent responsibility" (Marshall, 249). But if the vessel be disabled on her voyage, and the goods be shifted on board another, to be conveyed to their destination, the insurers continue liable; so also if it be a condition that the goods are at a particular place to be transhipped into other vessels, and these other vessels not appearing, they are transferred to a storeship. As to the ship, if the insurance be from the port, the risk commences when the vessel breaks ground; if at and from the port, it commences with her arrival at the port, or, if she is there at the time, at the execution of the policy. In the former case, however, the vessel must have arrived seaworthy, or at all events in a state to be repaired and equipped for the voyage. If the insurance be on the ship "in the same manner" as that on the goods, and the latter do not attach, the former falls with it. It is usually stipulated that the risk shall continue "until she hath moored at anohor 24 hours in good safety," and when such is the case, a loss happening after the time is not insured against, though the cause existed before the vessel was moored. The underwriter is indeed in all cases relieved if the loss does not actually take place till after the period fixed for the termination of the risk, though the event by which it is occasioned, and one which could not but occasion a loss, has

happened before—as where a vessel springs a leak, and is kept afloat by pumping. Premium.—The consideration on which the insurer undertakes to indemnify the insured is so termed. In marine insurance there is this peculiarity, that there is a claim on the part of the underwriter, for the stipulated premium, after receipt of it is acknowledged in the policy. This practice was first employed to exclude litigation on the ground of want of consideration in actions for loss: it afterwards became a convenient arrangement for facilitating the transactions of this department of business. The merchant has no time, at the critical moment when he wishes to insure, to make inquiry as to who will undertake the risk in the particular case; while there are capitalists ready to incur such risks of any description, at a corresponding premium. Between these two parties the insurance brokers drive their business, finding for the underwriters merchants who wish to be insured, and for the merchants underwriters who will undertake the risk. To facilitate this arrangement, the broker takes on himself the relations of debtor and creditor between the parties. He keeps an account, putting down all premiums to the underwriter's credit, as already received, placing against them return premiums and losses, and settling periodically with the underwriter. It was formerly held that the receipt did not bar the underwriter's claim from the insured, but it was decided otherwise in 1808 (Dalzell v. Main, I Camp.532). It leaves, however, the claim of the underwriter against the broker, and that of the broker against the insured, open. The premium and the risk are counterparts of each other, and if the latter do not exist, the former cannot be retained. If through mistake or misinformation an insurance be accomplished

where there is no interest, or on an interest far below that nominally insured for, there will be a claim for return of the whole premium in the one case, and for a proportional part in the other. If there are several policies negotiated to an extent far above the real interest, and without fraud,—as, in the case of loss each underhar above the real interest, and without trady—as, in the case of test each under-writer would have to pay his proportion, without regard to priority, so each will have to return a proportional part of the premium. Upon a wager policy the insured cannot recover the premium after the risk is run, though it would appear that he may do so before it is run; and "though there be nothing illegal in the contract, and the insured effect the insurance in the conviction that he had a good insurable interest; yet, if the risk be run, and the ship arrive safe, he cannot come upon the underwriters for a return of premium, on the ground that he had no legal title to her. But if a loss happen, in the case of a bona fide insurance, and the underwriters resist the claim of the insured on the ground of want of interest, they will not be allowed to retain the premium " (Marshall, 652). The premium is earned, and cannot be redemanded if the circumstances are such that at any time, had a loss happened, the underwriter would have been liable to the full amount insured for. Where the transaction is illegal, and the underwriter in conamount insured for. Where the transaction is illegal, and the underwriter in consequence resists payment of a loss, the law does not require the premium to be returned. In the case of material fraud on the part of the insurer, the contract is void, and the premium must be repaid. There is no return of premium where the contract is vacated through the fraud of the insured or his agent, though this doctrine was formerly much modified. Where the voyage is divisible into several distinct risks, and some of these have not been run, a corresponding portion of the premium is returnable. There can be no return of part of a premium where the risk is for a term which has begun to run. A premium, or part of it, may be returnable by stipulation on the policy.

Loss and Adjustment.—The loss in marine insurance is either total or p

The former does not infer the total extinction of the matter insured, but if it be The former does not must be total extinction of the instant muston, but it is properly abandoned to the underwriters, on account of the extent of the loss, that loss is considered total. [Abandonment.] Where the policy is valued, the amount of a total loss is fixed and settled, subject to modification if fraud be proved. [Policy.] Where the policy is not valued, the amount remains to be adjusted. "If the Where the policy is not valued, the amount remains to be adjusted. policy be an open one, it is an invariable rule to estimate a total loss, not by any supposed price which the goods might have been deemed worth, at the time of the loss, or for which they might have been sold had they reached the market for

loss, or for which they might have been sold had they reached the market for which they were destined, but according to the prime cost, that is, the invoice price, and all duties and expenses incurred till they are put on board, together with the premium of insurance. This is the only true, at least the only legal mode of estimating a loss, whether total or partial, on goods; and whether the goods shall have arrived at a good or a bad market is always immaterial. Neither is the difference of exchange to be at all regarded in the adjustment; for the underwriter does not insure against any loss arising from such causes." (Marshall, 632.) The ship is valued at the sum she is worth at the time of sailing, including expense of repairs, value of apparel, provisions, and stores, money advanced to the sailors, and all other expenses of outfit, together with the premium of insurance. A loss at first total may merge into a partial one; as where the ship is captured and recaptured. In the case of a partial loss on cargo, in an open policy, the amount of indemnity to be paid by the underwriters is calculated on the same principle as that above laid down for a total loss, viz. the cost of the goods—not the price they may bring. To ascertain this, the sum they would bring if they arrived uninjured at their destination is adopted, and the price they actually bring is deducted. The sum they have cost being then stated, a sum bearing to that the proportion which the actual proceeds bear to what would have been the proceeds deducted. The sum they have cost being then stated, a sum bearing to that the proportion which the actual proceeds bear to what would have been the proceeds were the goods undamaged, is found, and deducted from the cost-price—the difference is the sum to be paid. Thus, suppose the goods purchased at £100; that, if they had arrived undamaged they would have brought £150, but, being damaged, have only brought £50, then as 150:50:100 to £33, 5s. 3d. That sum deducted from £100, viz. £66, 13s. 4d. is the sum to be paid by the underwriters. Suppose the same goods brought to a falling market, where if undamaged they would bring not more than £75, and that being damaged they bring but £25—the same result would follow. It thus happens that when the market is a good one, the merchant will lose by his insurance—if a bad one he will gain. The underwriter is not responsible for loss arising from the duties or charges to be paid on the goods at their arrival; and so the price which forms the datum for calculating the loss, is the gross and not the not price. The premium of insurance and commission are added gross and not the net price. The premium of insurance and commission are added

to the cost-price. In a valued policy, the sum at which the goods are valued (if there be no fraud) should be taken instead of the cost-price; a comparison between the sum brought by the damaged goods and what they would have brought undamaged, being taken as the medium of calculation, as above stated. Where the goods are sold short of the port of destination, for behoof of the underwiters, the proper sum to be paid by them is the difference between the value (if on a valued policy), or the average price (if on an open policy), and the sum brought; in other words, they take the goods, and pay the original sum insured. Where partial loss is suffered on a ship which is repaired by the owner, the sum to be paid is the cost of repairing, with a deduction of one-third, in consideration of the value of the new materials.

The settling and ascertaining the amount of a loss, with the proportion of it which each underwriter has to pay, is termed "adjustment." Being indorsed on the policy, and signed by the underwriters, with a promise to pay within a given time (as it generally is, except where the liability is disputed in too), it amounts to an admission of the claims of the insured as against them, and precludes them from calling on him for farther proof. It is not, however, conclusive against the underwriters who not illustrates are not appropriately who not illustrates are not appropriately as the set of the result of the validity of underwriters, who, until payment, may plead any defence, going to the validity of the transaction, such as misrepresentation or breach of warranty, but the proof

the transaction, such as misrepresentation or breach of warranty, but the proof will lie with themselves, and they will have to make out a strong case.

*Representation is the term technically applied to any material statement, either verbally or in writing, by the insured to the insurer, if it contain collateral circumstances on which the latter may be supposed to calculate the extent of the risk. Warranty is a condition, and unless it be fulfilled, the contract is void. Representation is only the ground on which the contract is entered on, and if it be false, the insurer can only be relieved by showing that he has been misled as to the nature of the risk he has insured against. A warranty appears on the face of the policy,—representation is on a separate writing, or is parole [Warranty]. The last representation is the obligatory one, and if it be inconsistent with an earlier representation, will readily have the effect of neutralizing it. Thus, where a ship was represented as American on presenting the slip, but at the subscribing of the representation, will readily have the effect of neutralizing it. Thus, where a ship was represented as American on presenting the slip, but at the subscribing of the policy it was merely stated generally "that it was an insurance on goods in the Hermon," the ship was held not to have been represented as American (Dawson v. Atty, 7 East. 367). If there is no subsequent statement, however, a representation made at the time of signing the slip will rule. If there is a material misrepresentation, it is not necessary for releasing the underwriter that it be shown to be fraudulent. "A representation," says Lord Mansfield, "must be fair and true as to all that the insured knows; and if he represents facts without knowing the truth, he takes the risk upon himself." And so, where the insured represented the ship safe on the 11th, whereas she was lost on the 9th, this, though merely the result of his calculation, released the underwriter (Macdowall v. Fraser, 1 Doug. 260). A wilful misrepresentation on a point material to the risk voids the contract, and A wilful misrepresentation on a point material to the risk voids the contract, and the insured will not recover though the loss arise from circumstances unconnected with the representation.

A particular form has for two centuries been in use, in which the majority of policies are effected in England, unless when there are peculiar conditions to be inserted. It will be found with its several clauses under the head Policy. If the serted. It will be found with its several clauses under the head Policy. If the policy contain warranties on the part of the insured, these must turn out strictly true, otherwise the obligation of the underwriter ceases to be in operation from the moment when they become untrue [Warranty]. There are certain duties on the part of the insured deemed necessary for the security of the underwriter from fraud, which are tacit obligations created by the existence of the contract, such as that the vessel shall be seaworthy, and shall not deviate from her proper course. [Seaworthiness. Deviation. Abandonment.] (Park on Insurances. Marshall

on Insurance.)

on Insurance.)

INTEREST is defined by economists to be the net profit of capital; but, in the commercial acceptation of the term, it may be more correctly described as the consideration agreed to be paid for the use of money. The sum on which the interest is reckoned is called the *Principal*, and the sum per cent. agreed on as interest, the *Rate*. The latter, viewed spart from legislative interference, is in the general case determined by, lst, the average rate of profit derived from the employment of capital; 2d, the security afforded for the repayment of the principal; and, 3d, the duration or convertibility of the learn or convertibility of the loan.

1. That the rate of interest allowed on borrowed capital must, in the general case bear a proportional relation to the average rate of profit yielded by its employment seems evident. Much will be given for the use of money when much can be made of it; but, on the other hand, no man will pay more for its use than he has a prospect of making by its investment. Hence, in newly settled countries, where the facilities for the advantageous employment of capital are great, interest is high; while, in older countries, where these facilities are comparatively less, interest is low. In the United States, Canada, and Australia, interest varies from 6 to 15 per cent.; but in Britain and Holland it rarely exceeds 5 per cent.

2. It must also vary according to the risk attending the repayment of the loan. No person would lend on the personal security of an individual of doubtful solvency at the same rate as on mortgage over a land estate; nor would a capitalist advance money to a nation engaged in war, or distracted by civil commotions, on terms so advantageous as to a state where the government is settled, and the people industrious, contented, and civilized.

3. The duration or convertibility of the loan has also to be taken into account

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3. The duration or convertibility of the loan has also to be taken into account. When the money lent continues available at all times, there exists an inducement for the lender to prefer such an investment, even at a reduced rate of interest, as he thereby retains every chance of its more profitable employment otherwise. On the other hand, where the investment, however secure, requires the capital to be looked up during a considerable time, the lender will naturally demand a higher rate of interest, as all favourable chances are precluded until the expiration of that time. So at present exchequer bills, and deposits in banks, yield only about 5 per cent., while 4 to 5 per cent. can be obtained on mortgage, or good personal security, where the loan is to continue for a fixed time. This principle, however, does not apply when the market rate of interest is unusually high, as the lender may then consider it of advantage to secure an investment at that higher rate of interest.

Though by these principles, as adjusted by the natural competition of borrowers and lenders, the rate of interest is permanently regulated, yet in all highly com-

Though by these principles, as adjusted by the natural competition of borrowers and lenders, the rate of interest is permanently regulated, yet in all highly commercial communities there are a variety of other causes in operation, which lead to temporary fluctuations. Thus overtrading, a stagnation of credit, public leans, or any other circumstance which leads to a large amount of money capital being withdrawn from the market, will produce for a time a rise of interest much above the average rate; as, on the other hand, a fall below this rate will be produced through the disengagement of capital by a stoppage in any of the usual channels of trade, by payments on account of the public debt (even slightly sometimes by the half-yearly dividends), or by any other circumstance which leads to a large amount of money capital being thrown on the market for investment. The state of war elevates the rate of interest by the general feeling of insecurity which it engenders, as well as by the extra demand created for loans by government.

Besides these influences, a considerable effect has, in most countries, been produced by the usury laws, which have interfered to prevent a fair and free market rate of interest, by imposing heavy penalties on all such persons as shall take more than a certain fixed rate. These laws originated in a mistaken interpretation of a text in the Jewish law (Deut. c. 23, v. 20), and in the policy of protecting the poor against tyrannical extortion; but very little reflection is necessary for discovering that, however well adapted they may have been to a former state of society, the case is now widely altered,—money having become as much a merchantable article as any other. In these times, such laws serve occasionally to obstruct mutual accommodation upon terms justified by fair competition, and by a due consideration of the greater or less risk that may attach to the intended application of any capital. They are not less unjust than impolitic, inasmuch as they fail to operate according to the prin

sidered as holding a place amongst those remnants of barbarism which we are always alow in eradicating.

The legal rate of interest, after successive reductions, was fixed in Britain in 1714 (12 Anne, c. 16) at 5 per cent.; and in Ireland, in 1732, at 6 per cent. These rates, however, have been at various times considerably below the market rate. In 1806, £5, 17s. per cent. was paid on a loan to government (on whom the usury laws are not binding), and at various other periods during the war the rate paid by government was above 5 per cent. Such being the interest on public securities, a much higher fell to be exacted on that of private parties, and a great variety of expedients were accordingly adopted for defeating the usury laws. Landed proprietors borrowed at extravagant rates on redeemable bonds of an-

nuity, while, by the mercantile classes, the law was evaded by collusive transactions in the funds, and by other less reputable devices, in which an extra per centage was naturally levied by the creditor as a guarantee against the risk, and a recompense for the odium attending a breach of the statute. It came at length to be seen and acknowledged that the usury laws produced and magnified the evils they were intended to remedy (Commons' Report on Usury Laws, 1818); and in 1833, a clause was introduced into the act renewing the charter of the Bauk of England, by which a higher rate than 5 per cent. may be charged on bills not having more than 3 months to run; while, by later acts (7 & 8 Wm. IV. and 3 & 4 Vict. c. 83) this privilege is, until 1st January 1843, extended to bills not having more than 12 months to run; all simple loans of sums above £10 are likewise exempt from the usury laws during the same period, provided they be not on landed or other real security. The act 3 & 4 Vict. c. 83 will doubtless be renewed, and perhaps extended; so that in as far as the mercantile community is concerned, the usury laws may now be considered at au end.

The fluctuations in the market rate of interest in this country rarely exceed 1 per cent., viz. from about 2 to 3, or rather 3½ per cent. on Exchequer bills and deposits in banks; from 3½ to 4 per cent. on the first class of land securities; and from 4 to 5 per cent. on bills of exchange,—the medium rate being thus about 3½ per cent. Money, however, like all other commodities, is found cheapest where it exists in greatest abundance, and hence the rates in the metropolis are commonly lower than in the provinces, though they are subject to greater fluctuations; the discount on the same class of paper varying at different periods from about 2½ to 5½ per cent. The general criterion for judging of the market rate at any particular time is the charge made by the banks for discounting a good bill of exchange; but in the higher commercial circles of London, the rate and premium on Exchequer bills are supposed to afford the best indication of the state of the money market; the price of consols, though frequently referred to, is a much more imperfect guide, particularly of late

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The average rate of interest, and its probable continuance, have of late been a frequent subject of discussion, more especially in reference to Life Assurance Companies and other institutions, whose operations are based on the continuance of a certain fixed rate for a number of years. Mr Babbage and Mr Finlaison, founding upon the price of stock for a lengthened period, have estimated the probable average rate in this country for a considerable time to come at 4 per cent. (Treat. on Assurance, p. 20, and Par. Paper, 1829, No. 224, p. 35); but, looking to the principles by which interest is adjusted, it is manifest that estimates founded upon such data are entitled to little confidence. The average rate of profit is the limit to which all oscillations in the market rate of interest constantly gravitates; and as the tendency of profits is to fall in all countries as recourse is had to the cultivation of poorer soils, and industry becomes less productive, it follows that the natural tendency of interest is to fall likewise. Happily, this tendency in profits is checked at repeated intervals by improvements in machinery, discoveries in the science of agriculture, better combinations of labour and capital, and greater freedom of commerce; so that the present average rates will probably be maintained for a considerable number of years. The subject is, however, one of acknowledged difficulty; and meantime, Mr De Morgan recommends that the rate assumed by assurance offices should never exceed that at which the government can borrow.

(Essay of Probabilities. p. 257.)

assurance offices should never exceed that at which the government can borrow.

—(Essay on Probabilities, p. 257.)

Interest is either simple where it is always calculated on the original principal sum, or compound, where the interest itself is periodically accumulated, or converted into principal. Simple interest itself is periodically accumulated, or converted into principal. Simple interest is legally due in all cases in which it is stipulated for, unless where it comes within the now limited operation of the usury laws [Usurr]; and where not stipulated for, the right may be established by usage. It is due on all bonds, bills, and promissory notes, from the time of payment. By 3 & 4 Wm. IV. c. 42, §§ 28, 29, it is provided that upon all debts or sums certain, payable at a specified time or otherwise, the jury, on the trial of any issue of damages, may allow interest to the creditor at a rate not exceeding the current rate, from the time when the debts or sums certain were payable, if they be payable by virtue of some written instrument at a fixed time, or if payable otherwise, then from the time when a demand of payment has been made in writing, with notice that interest will be claimed from its date, until the torm of payment; interest being also payable in all cases in which it is payable by common law. It is farther provided, that the jury, on the trial of any issue or inquisition, may give damages in the nature of interest, over and above the value of the goods at the

time of the conversion or seizure, in actions of trover or trespass de bonis asportatis, and over and above the money recoverable in all actions on policies of insurance where a writ of error has been sued out in any action personal, and judgment given for the defendant, interest is to be allowed by the Court of Error for such time as execution has been delayed.

This act does not extend to Scotland, but the practice there is similar. It is

This act does not extend to Scotland, but the practice there is similar. It is usual in Scotland for bankers' and land-stewards' accounts to be periodically settled, and the interest added to the principal. Compound interest is demandable in such cases; and indeed it is virtually charged in all cases of accounting where balances are periodically accumulated; it is also invariably charged in all calculations of annuities, assurances, and reversions, as for periods beyond one year, it is, in truth, the only method by which the value of money can be properly ascertained. But the law never considers compound interest as directly chargeable on an ordinary debt or loan; though in the generality of cases it would be equitable that this should be done, seeing, that as soon as a sum of money is payable, it matters little whether it be due under the name of principal or interest,—the use of it being of equal value to the owner. to the owner.

Interest Calculations.—The simple interest of any sum for one year at 5 per cent. is obviously 1-20th of such sum (or one shilling for each pound), and the interest for one day 1-365th part of this 1-20th, or 1-730th part of the principal; while this last, multiplied by any number, will evidently give the interest corresponding to the same number of days. Hence,—

I. To calculate interest at 5 per cent., multiply the principal by the number of days, and directly the results the res

1. To calculate interest at o per cent., multiply one principal by the number of days, and divide the product by 7300.

II. To calculate interest at any other rate, find what it comes to at 5 per cent., and take a corresponding proportion of the same for the rate required.

Ex. Required the interest on £1520, 16s. 8d. for 8 days at 4 per cent.

1520 16 8 or, by decimals 1590-833

Approximations are sometimes adopted in practice; thus, interest at 5 per cent. State of taking one penny per pound per month.

Compound interest may be calculated in the same manner as simple, adding the interest to the principal at each successive period; but when the periods are numerous, recourse must be had to logarithms, or to tables in the manner pointed out in next article.

Simple Interest Tables.—Booth's 5 per cent., Stenhouse's 5 per cent., Dunn's (Decimal) 5 per cent., Marshall's 4 per cent., Pollman's, &c.

INTEREST (COMPOUND) AND ANNUITIES. Under the head ANNUITY we have given a brief account of that kind of property when viewed merely as a subject of commerce. In the present article we propose to explain briefly the principles of compound interest and annuities, and to furnish popular rules and tables for the solution of the cases which most commonly occur in practice. In so doing, we shall first treat those cases which are founded upon the operation of compound interest alone, and next, those wherein the operation of compound interest is combined with the chances affecting the duration of human life.

I. COMPOUND INTEREST AND ANNUITIES CERTAIN.

The cases which occur under this head may, in a general point of view, be comprised in combinations of the five following quantities:—

The Principal, signifying either a principal sum put out at interest, the present value of a sum due at a future period, or of an annuity, or the sum which, being immediately invested, will be exactly sufficient with its accumulations to provide for the said sum due at a future period, or for the instalments of the annuity as they fall due. Under the latter signification it is sometimes called the number of years' purchase the annuity is worth.

The Time, or a certain number of years commencing from the present. The Rate, or the ratio which the interest accruing in one year bears to the principal producing it. Thus $\frac{1}{150} = .05$ is the rate when interest is at 5 per cent., $\frac{1}{150} = .04$ when the rate is 4 per cent., the rate being thus, in all cases, equal to the

simple interest of £1 for one year.

The Annuity, or the sum falling due at the expiry of each year.

The Annuity and the sum falling due at the expiry of each year.

The Annuity capital due at a future period, which, by discount is reducible to such principal, or the amount of an annuity for the said time accumulated at interest.

From the relation subsisting betwirt these five quantities, we are enabled, provided any three are supplied as data, to obtain the remaining two. In practice, advantage is taken of this relation to form tables, in which the rate and the time are always given quantities, while a third is denoted by unity. By means of such tables we are enabled to solve, either directly or mediately, all the cases which occur without the aid of analysis, excepting those in which the time and rate are both among the unknown quantities. The tables introduced for that purpose at the end of this article are four in number; and their construction may be explained as follows: follows :-

Table I.—Principal sum of £1 accumulated, or amount of £1 in any number of years.

Years. The interest of £1 for one year at 5 per cent. being '05, the sum of the principal and interest, or the amount at the close of the first year will be 1.05. This being the sum on which interest is payable during the next year, a proportional increase will take place at the close of the second year, or 1:1.05:

TABLE II .- Principal sum of £1 discounted, or present value of £1 due at the end of any number of years.

The present value of £1 to be received at the end of one year must be such a sum, as being improved at interest for one year will exactly amount to £1, and must evidently bear the same pro-

portion to £1 that £1 does to its amount in one year. Hence, at 5 per cent. 1 05 : 1 :: 1 : $\frac{1}{1 \cdot 05}$ = 952381, the present value of £1 to be received at the end of one year. In the same way, 1.05: 1:: $\frac{1}{1.05}$: $\frac{1}{(1.05)^2}$ = .907029, the present value of £1 to be received at the expiration of two

years. It will also be found that the present value of £1 due 3 years hence is $\frac{1}{(1.05)^3} = .863838$; and the same process followed for the remaining years, and for the other rates, will produce the results exhibited in the table.

Table III.—Annuity of £1 accumulated, or amount of £1 per annum at the end of any number of years.

The first payment of an annuity being considered due at the end of the first year from the time of valuation, the second at the end of two years, and so on, it is obvious in considering the amount of an annuity for any given term of years, that, at the expiration of the term, the payment due will be £1 without interest; that due one year before will be £1 improved at interest for one year; that due two years before will be £1 improved at interest for two years, and so on until the first payment, which will be £1 improved at interest for a term one year less than the duration of the annuity. Hence Table III. may be readily obtained from Table I.; the number against any year in the former being just unity added to the sum of all those against the preceding years in the latter.

TABLE IV .- Annuity of £1 discounted, or present value of an annuity of £1 per annum for any number of years

The present value of an annuity of £1 for any given term of years is obviously the sum of the present values of £1 due at the expiry of one year, of £1 due at the expiry of two years, and so on until the expiry of the term, which values are given in Table II. as already explained. The number against any year in Table IV. will thus be equal to the sum of the numbers against that and all the preceding years in Table II., from which, therefore, it may be readily formed.

With these preliminary explanations of the tables we shall now proceed to give rules for the solution of the cases which most commonly occur in practice, employing for this purpose the decimal notation, the nature of which we have explained under the head DECIMAL FRACTIONS.

I. PRINCIPAL SUMS ACCUMULATED OR DIS-

COUNTED.

Case 1. Principal, Rate, and Time given, to

The first in Frincipus, reace, and a sum of ± 1 in the Amount. Rule. Find from Table I. the amount of £1 at the rate and for the time given, which multiply by the given principal.

Ex. Required the amount of £1500 in 10 years, reckoning interest at 4 per cent. per annum.
1-480944 × 1500 = 2220-386, or £2220, 7s. 4d.
Case 2. Amount, Rate, and Time given, to find the Principal.
Rule. Find from Table II. the present value

^{*} We have not deemed it necessary to introduce tables to exhibit the annuities whose amounts and present values are respectively equivalent to unity, as the numbers in such tables would be merely the reciprocals of those shown in Tables III. and IV.; £. the quotients of unity divides by the numbers in the latter, and which accordingly can be readily made to supply their place by being used as divisors in those cases where the corresponding numbers in the former would be employed as multipliers and exist example. ployed as multipliers, and vice versa.

of £1 at the rate and for the time given, which

of £1 at the rate and for the time given, which multiply by the amount.

Ex. Required the present value of £1087, 5s. 7d. payable at the end of 15 years, or, what at the same, the principal sum which will amount to £1087, 5s. 7d. in 15 years; interest 5 per cent.

-481017 × 1087-279 = £383.

Case 3. Principal, Rate, and Amount given, to find the Time.

Rule. Divide the amount by the principal, and the quotient will be the amount of £1 at the given rate; which look for in Table I. under the given rate; which look for in Table I. under the same rate, and contiguous to the said amount will be found the time required.

Ex. I. In what time will £1000 amount to £2613, 17s. 3d. at 3 per cent?

Here, £213-262 + 1000 = 2*6138*2; which, in Table I. under 3 per cent, is found contiguous

to 35 years.

When the exact quotient is not found in the table, take the difference between the next highest and next lowest numbers, and also betwixt the quotient and the number nearest to it and the former will bear to the latter the pro and the former will bear to the latter the pro-portion which one year, or 305 days, will bear to the number of days to be added to or deducted from the years found contiguous to such nearest number, according as it is less or greater than the exact quotient, in order to make up the

the exact quotient, in order to make up the time required.

Ex. 2. In what time will £100 amount to £265, 12a. 5d. at 5 per cent.?

Here, 255-5388 + 100 = 2-656308. By Table I. the amount of £1 in 20 years is 2-653298, and 121 years, 2-785935; difference 133965. But 2-656208 exceeds 2-653298 by -100291 only; hence, as -13265 : 365:: -00291:8, the time required is 20 years and 8 days.

Case 4. Principal, Amount, and Time given, to find the Rate.

to find the Rate

Rule. Divide the amount by the principal, and the quotient will be the amount of £1 in the given time, which quotient will be found contiguous to the said time in Table L under

Ex. I. At what rate per cent. per annum will £400 amount to £569, 6a. 6d. in 9 years? 569-435 + 400 = 142331; which, in Table I., is found contiguous to 9 years, and under 4 per

When the exact quotient is not found in the table, an approximation may be made to the rate in a manner similar to that adopted in regard to the time in Case 3.*

gard to the time in Case 3.* Ex. 2. At what rate per cent. per annum will £100 amount to £179, 9a. 4d. in 17 years? Here, 179-467. 100 = 179467. By Table I. the amount of £1 in 17 years, is at 3 per cent., 135394, and at 4 per cent., 134780; difference, 29300. Hence, as 179467 exceeds 135324 by 14183, we have 29300 : 1 per cent. (the difference between 3 and 4 per cent.) :: 14183 : 43069; and the rate required is 349069, or about 34 per cent.

II. TERMINABLE ANNUITIES.

Case 5. Annuity, Rate, and Time given, to find the Amount.

Rule. Find in Table III. the amount of £1

per annum, at the rate and for the time given, which multiply by the annuity.

Ez. Required the amount of an annuity of £50 for 21 years, reckoning interest at 5 per

cent. per annum. 35-71925 \times 50 = 1785-9625, or £1785, 19a. 3d. Case 6. Annuity, Rate, and Time given, to find the Principal or Present Value.

Rule. Find in Table IV. the present value of £1 per annum, at the rate and for the tine given, which multiply by the annuity. Ex. Required the present value of an annuity of £1000 for 20 years at the rate of five per cent.

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per annum.

of £1000 for 30 cars at first of the per cancum.

18*46321 × 1000 = 12468-21, or £12,463, 4a. 2d.

Case 7. Principal, Rate, and Time given, to find the annuity.

Rule. Find in Table IV. the present value of an annuity of £1 at the rate and for the time given, and divide the given principal thereby; the quotient will be the annuity required.

Ex. A gentleman is willing to aink £563 for an annuity to be paid yearly for 15 years. What annuity ought he to receive, reckoning interest at 5 per cent. per annum?

253 + 10*379 = 26*387, or £50, 7a. 9d.

If the question had been, what annuity to continue 15 years will pay off a debt of £523, computing interest at 5 per cent, the annew would have been the same.

Case 8. Principal or Fresent Value, Annuity,

computing interest at 5 per cent., the answer would have been the same.

Case 8. Principal or Freeent Value, Annuity, and Rate given, to find the Time.

Rule. Divide the principal by the annuity, and the quotient will be the present value of an annuity of £1 at the given rate; which quotient will be found in Table IV., under that rate and contiguous to the time required.

Ex. A sum of £523 is given for an annuity of £50, 7s. 9d., interest at 5 per cent. per annum. Required the duration of the annuity.

523 + 50.387 = 10.3796; which, under 5 per cent. in Table IV., is found contiguous to 15 years. If the question had been, in what time will an annuity of £50, 7s. 9d. pay off s. debt of £523, computing interest at 5 per cent. per annum, the answer would have been the same.

Case 9. Principal or Present Value, Annuity, and Time given, to find the Rate.

Ruiz. Divide the principal by the annuity, and the quotient will be the given time; which quotient will be found contiguous to the said time in Table IV., under the rate required.

Ex. An annuity of £100 for 15 years is sold for £1037,9665 + 100 = 10.37366; which in Table IV., contiguous to 18 years, is found under 5 per cent.

Case 10. Annuity, Rate, and Amount given,

Case 10. Annuity, Rate, and Amount given, to find the Time.

to find the Time. Rule. Divide the amount by the annuity, and the quotient will be the amount of £1 per annum at the given rate; which will be found in Table III. under that rate, and contiguous to the time required. Ex. In what time will an annuity of £50, 7s. 9d. amount to £1087, 5s. 7d. at 5 per cent.

per annum? $1087 \cdot 2794 \div 50 \cdot 3870 = 21 \cdot 5785$; which, in Table III., is found under the said rate, and contiguous to 15 years.

Case 11. Annuity, Time, and Amount given, to find the Rate.

to find the Rate.

Rule. Divide the amount by the annuity, and the quotient will be the amount of £1 per annum for the given time; which quotient will be found in Table III. contiguous to the said time, and under the rate required.

Ex. At what rate per cent. per annum will an annuity of £50, 7s. 9d. amount to £1087, 5s. 7d. in 18 years?

1087-2794 + 50-3870 = 21-5785; which is found in Table III. contiguous to 18 years, and under 5 per cent.

^{*} These methods of approximating to the time and the rate are of general application to the succeeding Cases.

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Case 12. Amount, Rate, and Time given, to

Case 12. Amount, Rate, and Inne given, of ind the Annuity.

Rule. Find in Table III., under the rate, the amount of an annuity of £1, in the given time; divide the given amount thereby, and the quotient will be the annuity required.

Ex. Required, the annuity which will amount in the control of the contro

15 years to £1087, 5s. 7d., at 5 per cent. per annu 1087-2785 + 21-5785 = 50-387 or £50, 7s. 9d.

III. PERPETUAL ANNUITIES

When an annuity continues payable without termination, it is called a perpetual annuity, or perpetuity. Of the five quantities considered under the last head, two, namely, the amount and the time, fall necessarily to be discarded, as in perpetual annuities they become interior, and consequently unassignable. The three quantities remaining to be noticed are, 1. The annuity; 2. The rate of interest; and 3. The present value of the annuity, or the principal, which, being immediately laid out, will yield annually and perpetually a sum equal to the annuity.

The simple interest of any sum for a year being what may be produced annually by that sum, without increasing or diminishing it, must be evidently equal to the perpetual annuity of which such sum will be the present value. And as while the rate continues the same the annual interests produced by any two sums are to each

while the rate continues the same the annual interests produced by any two sums are to each other as the principals which produced them, it follows that at 5 per cent. 5: 1::100:100 + 5 = 30; therefore, when the rate is 5 per cent., the value of the perpetual annuity is 30 years' purchase. In the same manner, when interest is at 4 per cent., 4: 1::100:100 + 4 = 25; and the perpetual annuity is worth 25 years' purchase. And it follows, that in every case the value of a perpetual annuity may be found by dividing any sum by its interest for one year. This being premised, the solution of the three following cases becomes nearly self-evident.

Case 13. Annuity and Rate given, to find the Principal or Present Value.

Rule. Divide the annuity by the rate, and the quotient will be the principal or present value required.

ductions will be principal to present value required.

Ex. Required the value of an estate of which the yearly rent is £1500; reckoning interest at 3 per cent, per annum. 1500 + 03 = £50,000.

1800 + 03 = £50,000.
Case 14. Principal or Present Value and Rate given, to find the Annuity.
Rule. Multiply the present value by the rate, and the product will be the annuity.
Ex. A gentleman purchases an esfate for £14,000; at what yearly rent must he let it in order to have 4 per cent. per annum upon the price?
14000 × 04 = £560.
Case 18. Principal or Present Value and Annuity given, to find the Rate.
Rule. Divide the annuity by the present value.
Ex. An estate which cost £5000 is let for £150 per annum; what rate of interest has the purchaser on the price.

per annum; what rate of interest has the purchaser on the price.

150 + 5000 = '03, or 3 per cent.

When, as is assumed throughout the present article, the interest is convertible into principal at the same terms as the annuity is payable, no difference arises in the valuation of perpetual annuities from the circumstance of the instalments being payable twice a-year, as the annuity divided by the rate of interest for one year must always produce the same quotient as half the annuity divided by half the annual rate of interest.

V. Dawsbard on Raymenous Asymptoms

IV. DEFERRED OR REVERSIONARY ANNUITIES.
An annuity is said to be deferred when it is not entered upon immediately, but at the expiration of a certain time. Deferred annuities may be either terminable or perpetual. The chief cases are the following:—

1. Deferred Terminable Annuities.

Case 18. Annuity, Rate, Time deferred, and Time of payment given, to find the Principal or Present Value.

Rule. Find in Table IV., under the given rate, the present value of £1 per annum, first for the time deferred, and then for the time deferred and time of payment added together; subtract the former from the latter; then multiply the remainder by the given annuity, and the product is the principal required.

Ex. What sum should now be given for the reversion of a lease or annuity of £36 per annum, for 14 years after the next 7 years, in order that the purchaser may make 5 per cent. per annum of his money.

19:82115 — 578637 = 703478, which, multiplied by 35, produces £246, 4s. 4d.

Case 17. Principal, Rate, Time deferred, and Time of payment given, to find the Annuity.

Rule. Find by Case 1 what the principal will amount to in the time deferred; then find by Case 7 what annuity that amount will purchase.

Ex. If the reversion of an estate for 14 years after the next 7 years cost £246, 4s. 4d., what rent ought it to produce in order that the purchaser may make 5 per cent. per annum of his money?

By Case 1 £246:216 amounts in 7 years, at 5 per cent., to £346:432; equivalent by Case 7 to a rent for 14 years of £35.

Case 18. Principal, Annuity, Rate, and Time deferred given, to find the Term of Payment.

Rule. Find by Case 1 the amount of the principal at the given rate, at the expiry of the time deferred; then divide this amount by the given annuity, and the quotient will be the value of an annuity of £1 for the time of payment; which last will be found as in Case 8.

Ex. A debt of £316, 18s. 9d. is proposed to be paid off by assigning an annuity of £175 per annum, deferred for 9 years; to 180-198; and 1380-198 + 178 end of 9 years, to 180-198; and 1380-198 + 178 end of 9 years, to 180-198; and 1380-198 + 178 end of 9 years, to 180-198; and 1380-198 + 178 end of 9 years, to 180-198; and 180-198 + 178 end of 9 years, to 180-198; and 180-198 + 178 end of 9 years, to 180-198;

will be found contiguous to 11 years.

2. Deferred Perpetual Annutities.
Case 19. Annuity, Time deferred, and Rate given, to find the Present Value.
Rule. The excess of the present value of a perpetual annuity of £1 at the given rate (Case 13), above the present value of an annuity of £1 at the same rate, for the time deferred (Oase 6), gives the present value of the reversion of a perpetual annuity of £1 after the time deferred; and this, multiplied by the given annuity, will produce the principal required.
Ex. What sum ought to be paid for the reversion, after 40 years, of an estate in perpetuity, of which the yearly rent is £70, reckoning interest at 4 per cent, per annum.
25 — 19 79277 = 5 20723; which, multiplied by 70, gives £364, 10s. 14d.
V. Renewall of Leares.

70, gives £364, 10s. 14d.

V. RENEWAL OF LEASES.

Leaseholds and various other descriptions of property, when their annual income is susceptible of ascertainment, or of being reduced to a valuation, may be assimilated in all respects to annuities. In England, many societies, corporations, and colleges grant their leases for certain periods, the most usual of which are for 10, 20, 21, and 40 years; and it is customary for them to renew any number of years lapsed in such leases, on payment of a sum, as fine, which is agreed upon by the parties, the yearly rent or quit-rent remaining the same.

Case 20. Required, the Fine payable for renewing any number of Years in a Lease.

410

934 430, or £284, 5a. 7d.

VI. PRINCIPAL SUMS INCREASED YEARLY BY A CONSTANT QUANTITY.

Case 21. Principal, Rate, Time, and Yearly Increase given, to find the Amount.

Rule. Add the amount of the principal accumulated, at the rate and for the time given. (Case 1), to the amount of the yearly increase accumulated in the same way (Case 5), and the sum will be the total amount required.

Case 32. Principal, Rate, Time, and Amount given, to find the Yearly Increase.

Rule. From the given amount subtract the amount of the principal at the rate and for the time given (Case 1), and the remainder will be the amount of the yearly increase for the given

* The preceding rules and the accompanying tables furnish the means of solving the cases which most commonly occur in practice; but as computations must occasionally be made, not only at other rates than 3, 4, 5, and 6 per cent. per annum,—those to which our tables are confined,—but likewise upon the supposition of the interest, as well as the annuity, being payable half-yearly, or at other terms, we here subjoin formulæ which will enable any one acquainted with the elements of analysis to solve, with the aid of a table of logarithms, nearly all cases which can present themselves, except, as afterwards explained, those where the rate is the quantity sought.

Let p denote the principal or present value, and m the amount, in the sense in which those terms are used on page 406. Also let a signify the amusity, or one of the equal sums successively payable at the expiration of equidistant periods, whether yearly or half-yearly, &c.; n the member of those equidistant periods, whether yearly or half-yearly, &c.; n the rate, or ratio of the interest in one period to the principal, and which is equal in all cases to the interest of £1 for one period of time.

1. Principal Sums.

1. Principal Sums.

$$m = p (1 + r)^{n}$$
2. Terminable Annuities.

$$m = a \frac{(1 + r)^{n} - 1}{r}$$

$$p = a \frac{(1 + r)^{n} - 1}{r (1 + r)^{n}}$$
3. Perpetual Annuities.

$$p = a \frac{a}{r}$$

4. Deferred Annuities. Let d signify the deferred time, or the number of periods which elapse before the annuity is ex-tered upon, n the number of periods during which it is paid; and the other symbols as before.

Deferred Terminable Annuities.

eferred Terminable An
$$p = a \frac{(1+r)^n - 1}{r(1+r)^d + n}$$

Rule. From the present value of an annuity to continue from the present time until the expiration of the renewed term, subtract the present value of an annuity of £1 for the given time as \$10.90 in Table III., and the quotient will be the yearly related to the lease.

Ex. Thirty years having expired in a lease for 40 years, required the fine for renewing 10 years of the same, supposing the yearly rental £60, and the rate of interest 5 per cent.

By Table IV. the value of £1 per annum for 20 years, the number until the expiration of the renewed term, is 12*4623, and for 10 years, the unexpired time, it is 7*7217; and 12*4632 - 7*7217;

= 47408; which last, multiplied by 60, gives 284*430, or £284, & 7.d.

VL Paincipal Sums increased yearly by a late of an annuity of £1 for the given time as \$10.90 in Table III., and the quotient will be the yearly in Table III., and the quotient will be the yearly increase frequired.

VI. Paincipal Sums increased yearly summer to fan annuity of £1 for the given time as \$10.90 in Table III., and the quotient will be the yearly increase required.

VI. Paincipal Sums increased yearly summer to fan annuity of £1 for the given time as \$10.90 in Table III., and the quotient will be the yearly increase required.

VI. Paincipal Sums increase for the given time as \$10.90 in Table III., and the quotient will be the yearly increase required.

VI. Paincipal Sums Diministract pure annuity of £1 for the given time as \$10.90 in Table III., and the quotient will be the yearly increase required.

VI. Paincipal Sums Diministract pure in Table III., and the quotient will be the yearly increase required.

VI. Paincipal Sums Diministract pure in Table III., and the quotient will be the yearly solven.

Time. Table III., and the quotient will be the yearly increase required.

VI. Paincipal Sums increase for the principal, care solven.

Time. Rounting III.

anuity accumulated in the same manner (Case 5), and the remainder will be the unertinguished amount required.

Case 24. Principal, Rate, Time, and Amount unextinguished at the end of the Time given, required the Yearly Decrease.

Rule. From the amount of the principal, at the rate and for the time given (Case 1), subtract the amount unextinguished, and the remainder will be the amount, corresponding to the terminy decrease; which latter being divided by the amount of an annuity of £1 at the end of the given number of years, as shown in Table III., will give the termily decrease required.

N. B. The ordinary questions in relation to Stakting Funds may be solved by the two preceding Cases, and Cases 7 and 8.*

Deferred Perpetuities.

a

$$p = \overline{r(1+r)^d}$$

5. Principal Sums increased or diminished at each equal Interval of Time by a constant Quantity. Let a denote this quantity, the other symbols being as at first.

$$m = p (1 + r)^n + a \frac{(1 + r)^n - 1}{r}$$

When Principal diminished.

$$m = p (1+r)^n - a \frac{(1+r)^n - 1}{r}$$

EXTENSIONS OF THE PRECEDING FORNULE.
Hitherto we have supposed the annuity and
interest to be due at the same periods; but as
these conditions have no necessary relation to
each other, we shall now exhibit those alterations of the formulæ which take place when the
interest is convertible into principal at shorter
periods than those at which the annuity is pay-

periods than those at which the annuity is payable, and view versa. Here let r denote the rate, or interest of £1 for one year; a the annuity nominally payable at the end of each year; a the number of year; and so the amount, and p the principal or present value as before; these symbols all bearing now the significations attached to them in the text on page 406. Also let denote the number of equal intervals in each year in which the interest is convertible into principal; and s the number of equal installments of the annuity in each year.

CASE I. When the interest is convertible into principal a certain number of times in each in-terval between the instalments of the annuity;—

being hence a whole number.

Terminable Annuities.

$$m = \frac{a}{s} \times \frac{\left(1 + \frac{r}{i}\right)^{in} - 1}{\left(1 + \frac{r}{i}\right)^{i} - 1}$$

II. Annuities on Lives.

Under this head may be classed not only annuities on lives, properly so called, but every beneficial interest which terminates with the lives of any one or more

but every beneficial interest which terminates with the lives of any one or more individuals, including salaries, and all that in law comes under the denomination of a life estate. It comprehends, likewise, Reversions, or the interest which the next proprietor has in any estate after the death of the present; and Assurances, in which the question is, what annuity must A pay to B during his life, in order that B may pay a given sum to A's representatives at his death.

Tables of Mortality.—The basis of all questions having reference to the failure or continuance of life must obviously be the law of human mortality. Tables of mortality are those which exhibit this law through the whole extent of life, by showing how many persons out of a certain number, as 10,000 born alive, die in each year, and consequently how many complete each year of their age. The first table of this kind was constructed by Dr Hawley, from observations at Breslau in Silesia, and published in 1693. Similar tables were afterwards published both in this country and on the Continent, of which there may be noticed Kerseboom's, Silesia, and published in 1693. Similar tables were afterwards published both in this country and on the Continent, of which there may be noticed Kerseboom's, printed in 1738, from Registers of State Annuitants in Holland; Thomas Simpson's, in 1742, founded on the London bills of mortality; De Parcieux's in 1746, from lists of nominees in the French tontines of 1689 and 1696; Dupre de St Maur's in 1749, from French parish registers. In 1769, Dr Price published his work on Reversionary Payments, in which were given tables constructed from observations in London, Norwich, and Northampton. In the 4th edition of Dr Price's work (1783) the Northampton Table was extended and improved: at the same time various other tables were furnished; in particular the Chester Table, lately republished in a other tables were furnished; in particular the Chester Table, lately republished in a corrected form by the Society for the Diffusion of Useful Knowledge in their work on Probability; and a table for the kingdom of Sweden, in which the sexes were distinguished, and the law of mortality determined for the bulk of the people. In 1815, Mr Milne, the eminent actuary of the Sun Office, published his treatise on 1815, Mr Milne, the eminent actuary of the Sun Office, published his treatise on the valuation of Annuities and Assurances, in which were given new tables deduced from the Swedish registers, and from observations at Carlisle and Montpellier. Since then, Mr Davies and Mr Babbage have put forth tables deduced from the experience of the Equitable Assurance Society; and the Parliamentary Reports on Friendly Societies in 1825 and 1827, and the return made to the Treasury in 1829 by Mr Finlaison, the government actuary, contains a variety of information concerning the rate of mortality among the nominees of the government tontines and annuities. Lastly, Mr Ansell, in his work (1835) on Friendly Societies, has, from an extensive collection of returns made to him, deduced the law of mortality which generally prevails among the members of these institutions. Of the tables now noticed, De Parcieux's, the corrected Chester Table, the Swedish Table of 1776-1795, and the table founded on the experience of the Equitable Society, are esteemed of high authority; but in practical importance they are inferior to the Northampton, Carlisle, and Government Tables, which, from their serving as the

$$p = \frac{a}{s} \times \frac{1 - \left(1 + \frac{r}{i}\right)^{-\frac{r}{i}}}{\left(1 + \frac{r}{i}\right)^{\frac{r}{i}} - 1}$$
Perpetual Annuities.
$$p = \frac{\frac{a}{s}}{\left(1 + \frac{r}{i}\right)^{\frac{r}{i}} - 1}$$

Terminable Annuitles.
$$m = a \left\{ \frac{1}{r} + \frac{\binom{d}{i} - 1}{2s} \right\} \cdot \left\{ \left(1 + \frac{r}{i}\right)^{fn} - 1 \right\}$$

$$p = a \left\{ \frac{1}{r} + \frac{\binom{d}{i} - 1}{2s} \right\} \cdot \left\{ 1 - \left(1 + \frac{r}{i}\right)^{-fn} \right\}$$

Perpetual Annuities.

$$p = a \left(\frac{1}{r} + \frac{\frac{1}{4} - 1}{2s} \right)$$
formula for deferred annuit

 $p = a \left(\frac{1}{r} + \frac{\frac{3}{4} - 1}{2s}\right)$ Formulae for deferred annuities, affected by similar conditions, may be readily obtained from the preceding, by deducting an annuity for the period deferred from one for the period deferred and in precession and in posse

 $p = \frac{s}{\left(1 + \frac{r}{i}\right)s} - 1$ Case II. When the instalments of the annulty are payable a certain number of times in each interval between the conversion of interest into principal; $\frac{s}{i}$ being hence a whole number.

Terminable Annuities. $m = a\left\{\frac{1}{r} + \frac{s}{2s}\right\} \cdot \left\{\left(1 + \frac{r}{i}\right)^{s} - 1\right\}$ $p = a\left\{\frac{1}{r} + \frac{s}{2s}\right\} \cdot \left\{1 - \left(1 + \frac{r}{i}\right)^{s}\right\}$ $\left\{1 - \left(1 + \frac{r}{i}\right)^{s}\right\} \cdot \left\{1 - \left(1 + \frac{r}{i}\right)^{s}\right\}$ $p = a\left\{\frac{1}{r} + \frac{s}{2s}\right\} \cdot \left\{1 - \left(1 + \frac{r}{i}\right)^{s}\right\}$ $\left\{1 - \left(1 + \frac{r}{i}\right)^{s}\right\} \cdot \left\{1 - \left(1 + \frac{r}{i}\right)^{s}\right\}$ $p = a\left\{\frac{1}{r} + \frac{s}{2s}\right\} \cdot \left\{1 - \left(1 + \frac{r}{i}\right)^{s}\right\}$ $\left\{1 - \left(1 + \frac{r}{i}\right)^{s}\right\} \cdot \left\{1 - \left(1 + \frac{r}{i}\right)^{s}\right\}$ The monstrations of all these formules will be found in the "Treatise on the Valuation of Annuities and Assurances," by Mr Milne, and the "Doctrine of Compound therest," by Mr Francis Cobaux. We have deemed it unnecessary to give more than one formula for each class of cases, as the others may be easily deduced from the given equation, by transposition, except in the case where the rate is the quantity sought. In this case the formula becomes so exceedingly complex, that recourse is generally had to approximate methods from tables in the manner explained in the text. The tables beat adapted for the period deferred and in possession.

The monstrations of all these formules will be found in the "Doctrine of Compound the rest." by Mr Milne, and the "Doctrine of Compound therest," by Mr Milne, and the "Doctrine of Compound therest." by Mr Milne, and the "Doctrine of Compound therest." by Mr Milne, and the "Doctrine of Compound therest." by Mr Milne, and the "Doctrine of Compound therest." by Mr Milne, and the "Doctrine of Compound therest." by Mr Milne, and the "Doctrine of Compound therest." by Mr Milne, and the "Doctrine of Compound therest." by Mr Milne, and the "Doctrine of Compound therest." by Mr Milne, and the "Doctrine of Compound therest." by Mr Milne, and the "Doctrine of Compound therest." by Mr Milne, and the "Doctrine of Compound therest." by Mr Mi

basis of almost all the annuity and assurance business in this country, are deserv-

basis of almost all the annuity and assurance business in this country, are deserving of particular attention.

The **Rorthampton** Tables**, formed by Dr Price from the registers of mortality kept at Northampton for 46 years from 1736 to 1780, were long the only ones in use, but they are now in much less repute. The observations embrace a considerable number of deaths, but no enumerations of the people were made to show how far the population was increasing, decreasing, or stationary (without which Mr Miline has proved that no correct tables of mortality can be constructed, while, on the other hand, no fixed rule appears to have been followed in interpolating the numbers dying annually from those given for decennial periods by the registers. In the report of the House of Commons on Friendly Societies in 1837, it is stated, upon the evidence of several of the most distinguished actuaries in the kingdom, "that these tables were originally formed in a degree upon hypothetical data," that "in truth there is not even a prima factic case in their favour," and that "the evidence appears to your committee to be strong and deciave in favour of the soft tables which give an expectation of life higher than the Northampton." Nevertheless, the Northampton Tables continue to be of high commercial importance, as they form the basis of the calculations of nearly all the life assurance societies instituted prior to 1816, and of many of those established subsequently. It may also be observed that the low value given by the Northampton Tables applies chiefly to ages under 60. Above 60, they are represented by that table nearly if not quite as good as by many other observations.

The Cartiels Tables, formed by Mr Milne from observations made by Dr Heysham in two partishes in Cartiels efform 1779 to 1787, give a higher expectation of life than the Northampton Tables. From the description of them, it appears that classified enumerations of the population were made at the commencement and termination of the observations, while the d

probabilities and Expectation of Life, &c.—These, in so far as necessary for the purposes of the present article, may be readily obtained from tables of mortality by the following rules in the doctrine of probabilities:—

1. The probability of any event happening is measured by a fraction, whose numerator is the number of ways in which it can happen, and whose denominator is the number of ways in which it can happen or fail. Thus, if there be 3 chances for the happening of an event, and 1 chance for its not happening, then will the probability of the event happening be measured by the fraction \$\frac{1}{2}\$.

2. The probability of the happening of several events that are independent of each other is equal to the product of the probabilities of the happening of each event considered separately. Thus, if the probability of the happening of 2 independent events be \$\frac{1}{2}\$ and \$\frac{1}{2}\$ respectively, then will \$\frac{1}{2}\$ \times \$\frac{1}{2}\$ measure the probability of the happening of both these events.

Applying these rules to the Carlisle Table of Mortality, we find that as at the age 30 the number of persons alive of 10,000 born is 5642, while at 40 this number is reduced to 5075, the probability of a person aged 30 surviving 10 years will be measured by the fraction \$\frac{5075}{2}\$. In the same way, the probability of a person aged

measured by the fraction $\frac{5075}{5642}$. In the same way, the probability of a person aged

25 surviving 10 years, will be $\frac{5362}{5879}$. Again, the probability that 2 persons, of the ages 30 and 25, shall jointly survive 10 years, will be $\frac{5075}{5649} \times \frac{5363}{5679}$

The average of forthcoming years, or what is improperly called by writers the expectation of life, is the number of years which, taking lives of the same age one with another, any one of these lives may be considered as sure of enjoying; those

who live beyond that period enjoying as much more in proportion to their number as those who fall short of it enjoy less. Consequently, the rule for finding it will be as follows:—Divide the sum of all the living at every age after the age of the given life by the number of persons living at that age: half unity added to the quotient will be the value required. Half unity is added, as the number of persons taken at the given age who have not lived out one year may be considered as having averaged one-half of a year's existence. The expectation of life at 90, by the Northampton Table, will be thus found:—The numbers living at each age above 90, added together, give 34 + 24 + 16 + 9 + 4 + 1 = 83: the number living at 90 is 46, and the former divided by the latter gives 1·91, to which adding half unity = '50, we have 2·41 for the expectation of life at 90.

The expectation of life is therefore different from the term of probable life, as the latter must obviously be the term within which a stated number of persons of a given age should be reduced to exactly one-half of the same number. Thus, according to the Carliale Table, the expectation of life at birth is 38.72 years; while the term of probable life is about 41 years.

The following table shows the expectation of life at different ages, deduced from

The following table shows the expectation of life at different ages, deduced from the Northampton, Chester, Carlisle, and Government Tables; Mr Davies' Table, founded on the experience of the Equitable Society, Mr Milne's Table for the whole population of Sweden, from 1776 to 1795, and De Parcieux's Table, founded on the French tontines :-

		North-	Equi-	D	Depar-		rnment.	Chester.		
Age.	Carlisle.	ampton.	table.	cleux.	Sweden.	Males.	Females.	Males.	Females.	
0	38-72	25-18			36.13	50-16	55.51	34.46	39-44	
1 5	51-25	40-84		48-25	47-92	49-93	54-23	46.45	50-57	
10	48-89	i 39•78 i	48-83	46.83	46.16	45.57	51-05	44:47	47-82	
20	41-46	33.43	41-06	40-25	38-96	36.39	43-99	37:30	40-49	
30	34:34	28-27	33-98	34-06	32-19	33-17	37.57	31.30	34-22	
40	27-61	23-06	27:40	27.50	25.45	97-02	31.12	24-69	27-96	
50	21.11	17-99	20.83	20.42	19-03	20:30	24:35	19-33	21-92	
60	14:34	13-21	15-06	14-25	12-85	14:39	17:32	13.96	15.40	
60 70	9-18	8-60	9-84	8-67	8-01	9-22	10-99	9-63	9-98	
80	5-51	475	5:38	4-67	4-85	4-94	6.90	7.10	6.60	
90	3-28	9-41	2.65	1.75	3-03	1.95	2-83	4.32	5-01	

Valuation of Life Annuities, &c.—The probabilities of life are, in these operations, combined with the interest of money. [INTEREST.] If a person has 9 chances in 10 to obtain possession of £100 at the expiry of a year, the present value of his expectation (disregarding interest) is the product of 100 by the fraction 15 of his expectation (disregarding interest) is the product of 100 by the fraction $_{10}^{\circ}$ or £90; but, assuming interest at b per cent., it is obvious, as the £90 is not due until the expiry of a year, that, in order to show its present value, it must be still farther reduced by one year's interest or rather discount on that sum. Similarly, if a person aged 30 is to acquire right to £1000 in the event of his attaining the age of 40, the present value of his expectation will be obtained by multiplying the £1000 by the probability of his attaining that age, and then discounting the product for 10 years; the latter operation being, as already shown (Case 2), performed by multiplying the said product by the present value of £1 due at the end of 10 years. Thus, in the case supposed, assuming interest at 5 per cent., and the probabilities of life as at Carlisle, we shall have $1000 \times \frac{5075}{5649} \times \cdot 613913 = 552\cdot216$, or £552, 4s. 4d., the present value required. In this way Endowments (Case 43) or Assurances on Surpresent value required. In this way Endowments (Case 43) or Assurances on Survivorship of Time are calculated.

The value of life annuities may be obtained in the same manner, by finding the present value of each year's rent as it becomes due from the given age to the oldest in the table of mortality, and the sum of all these will be the total present value of the annuity; but in finding the value of annuities on a number of lives of several successive ages, the process is considerably abridged by deducing the value of an annuity on the next younger life from the value of an annuity on a life one year

older, as follows:—
Rule.—" Begin with the oldest life in the table of observations; add unity to the rathe.— Degin with the oldest life in the table of observations; and this we she value of an annuity on that life (usually equal to 0), and multiply the sum by the expectation of a life one year younger, receiving £1 at the end of a year; the product will be the value of an annuity on the life one year younger: this value being substituted for the value of an annuity on the oldest life, and the process repeated, will give the value of an annuity on the next younger life, and so on till we come to the age of the given life."—(Baily on Life Annuities, p. 31.)

The value of annuities, as shown by the tables, is computed by this rule. The The value of annuties, as shown by the tables, is computed by this rule. The following is the procedure in the case of the Carlisle Table for single lives, assuming the annuity to be £1, and interest at 5 per cent. per annum.

The oldest life in the Carlisle Table is 104, the value of an annuity on which being evidently equal to 0, we proceed thus:—

O'lacar.	oquat to ty				£1 discount	Value (
A ges.	Annuity + 1.		Probability.		for 1 Year		Annuit
103	(1+0)	×	i i	×	9524	=	0.317
102	1.317	×	ŧ	×	9524	=	0.753
101	1753	×	•	×	9524	=	1-192
100	2-192	×	ŧ	×	-9524	=	1:624
99	2-694	×	*	×	9524	=	2.045
98	3.045	×	11	×	9524	=	2.278

ũ 9524 3.045 = 2.278 and so on till we come to the youngest age,—the operation being facilitated by the use of logarithms. The same procedure is followed in computing the values for joint lives. Thus assuming the Carlisle Table with interest at 5 per cent. as before, and the difference of age betwixt the two lives to be 5 years, we shall have

Ages.	Annuity + 1		Probabilities.	£	l discoun for l year	Value of Annuity.	
103 & 98	(1+0)	×	1 × 11 3 × 14	×	9524	=	0-249
102 & 97	1.949	×	3 × 14 5 × 18	×	19594	=	0.555
101 & 96	1.555	×	5 × 18 7 × 23	×	-9524	=	0-828

7 × 23
and so on throughout. In this way tables have been formed of the value of annuities on single lives at all ages and at the common rates of interest; and also on two joint lives: but cases which involve three lives are, in practice, solved by methods of approximation from the tables for two lives; as the variety of combinations which three lives admit would render the tables of very great length. Their construction is, however, in principle the same as the tables for two lives.

At the close of this article tables are given for single lives founded on the Northampton observations, and for the various rates of 3, 4, 5, and 6 per cent. interest; and by the kind permission of Mr Milne, similar tables are given, founded on the Carlisle observations, along with tables for joint lives. The tables for single lives include all ages, and those for joint lives all the usual combinations betwirt the ages 15 and 75. By means of these tables, nearly all the cases which occur in practice may be solved with facility. tice may be solved with facility.

Annuities Payable Half-Yearly, &c.—The values shown in the tables are computed on the supposition that the annuities are all payable yearly, and at the end of each year; but if they be payable more frequently, their value will be increased. A person who receives a life annuity half-yearly, besides gaining one half-year's interest on every moiety of his annuity, may live to receive a half-year's annuity more than the person who receives an annuity once in and at the end of each year. more than the person who receives an annuity once in and at the end of each year. For similar reasons, an annuity payable quarterly will be of greater value than that which is payable half-yearly. But however frequently the annuity may be payable, it has been found that its increase of value on this account cannot exceed half-a-year's purchase, which is the extent to which it is increased in the hypothetical case of the instalments being payable momently. Where the annuities are payable half-yearly, the common practical rule is to add \(\frac{1}{2}\) of a year's purchase to their tabular value; and when they are payable quarterly, to add \(\frac{3}{2}\) of a year's purchase; or expressing the same decimally, add to the tabular value of the yearly annuity, if it be payable half-yearly, 250; quarterly, 375;—also, if payable monthly, 456; weekly, 490; daily, 499; and in the hypothetical case of their being payable momently, 500. (Milne, p. 273. Ansell on Friendly Societies, p. 80.) Practical Solution of Cases.—With these prefatory explanations, we shall now proceed to show the mode of solving by the tables the cases which usually occur in practice.

practice.

I. Annuities on Single Lives.

Case 25. To find the Value of an Annuity on the Life of a Person of a given Age.

Rule. Multiply the sum by the value of £1 annuity on the assigned life.

Ex. Required the value of an annuity of £50 on the life of a person aged 45; Carliale Table, interest 4 per cent.

The value of an annuity of £1 on a life aged 45 is, by the Carlisle Table, 14·104, which, mul-

^{*} Life contingencies are now sometimes computed by the method invented by Mr Barrett and improved by Mr Griffith Davies, an account of which is given by M. De Morgan in the Companions to the Almanac for 1840 and 1842. See also Jones on Annuities.

lue required.

Case 26. To find the Annuity which any given
Sum will purchase during the Life of a Person of

a given Age.

Rule. Divide the given sum by the value of an annuity of £1 on the assigned life.

Ex. What annuity may be purchased for £703. 4a on a life aged 45; Carliale Table, in-

Ex. What annuity may be purchased for £703. 4s on a life aged 45; Carliale Table, interest 4 per cent. £705.2 + 14·104. £50. Case 27. To find the Value of an Annuity Deferred for any given Number of Years. Rule. Find the value of an annuity on a life older by the deferred term than the proposed life, which multiply by the present value of £1 payable at the end of the said term, and also by the probability that the life shall continue so long; the product will give the result required. Ex. A person aged 35 wishes to purchase an annuity for £50, for what may happen to remain of his life after 45; required the present value thereof; Carliale Table, 4 per cent. The value of an annuity of £10 at 45 is, by Case 25, £705, 2s.; the present value of £1 to be received at the end of 10 years is 475564; also the probability that a life aged 35 will continue 10 years is 4797 + 5362 = *881574: And 705-2 × \$73564 × *881574 = 419-989, or £419, 182. 35.

28. To find the Value of a Temporary

Case 25. 10 had not constant and annuity. Rule. Find by Case 27 the value of an annuity deferred for the proposed term; which subtract from the value of an annuity on a life of the given age; the difference will be the value re-

Ex. Required the value of an annuity of £50 for 10 years on a life aged 35; Carlisle Table, 4

per cent.
The value of an annuity of £50 on a life aged
35, deferred for 10 years is, by Case 27, 419:989;
the value of an annuity of £50 on the said life is
50 × 16'041, or 802'050; and 802'050 — 419:989
= 392'051, or £389, 1s. 3d.

LI. Annuiries on Two Lives.

Case 29. To find the Value of an Annuity on the Joint Continuance of Two Lives; that is for as long as they both continue alive together.

Rule. Multiply the sum by the value of £1 annuity on the two assigned fives.

Ex. Required the value of an annuity of £90

annuity on the two assigned fives.

Ex. Required the value of an annuity of £90 on the joint continuance of two lives, ages 40 and 60; Carlials Table, 8 per cent.

Value at ages 40 and 60 by Table I.K., is 7:961; and 7:861 × 90 = 716*49, or £716, 9s. 10d.

The tables of annuities on joint lives give their values only where the ages are equal, or their difference 5 years or any multiple of 5; but when the combination of ages of two proposed lives is not contained in these tables, the value of an annuity on their joint continuance may be determined according to the following rule, which is applicable to all cases where neither of the lives is under 12 years of age.

Extract from the tables the values of annuities on the joint continuance of the oldest of the proposed lives, and two others separately, which are younger than that oldest life by the multiples of 5, next greater and next less respectively than the difference of age between the proposed lives. That one of four arithmetical mean proportionals between these two values which corresponds with the proposed combination of ages will be nearly the value sought."—(Milne on Annutlice and Assurances, p. 290.)

Ex. Required the present value of an annuity of £81 on two joint lives aged 27 and 46; Carliale Table, 4 per cent.

The value corresponding to the ages 26 and 46

tiplied by 50, gives 705-2, or £705, 4a, the value required.

lue required.

Case 26. To find the Annuity which any given continually deducted from the former of these ference 233, the fifth part of which, 0464, being continually deducted from the former of these two values, gives the four arithmetical means which are the values of annuities on the corresponding combinations of lives omitted in the tables. Hence, as 27 and 46 is the combination of ages next in order to 28 and 46, we shall have 13 325 — 0464 = 13 2786, the value corresponding to the combination 37 and 46; and 13 2786 × 90 = 1105 074, or £1105, 1a 561, the value required. The result would obviously have been the same had 4 times the common difference, 0464, or 1836, been added to the value corresponding to the ages 31 and 46. Thus 12 093 + 1856 = 12 2786, as before. Case 30. To find the Value of an Annuity on the Longest of Two Lives, that is, for as long as either of them continues alive.

Rule. From the sum of the values of annuities on the two single lives subtract the value of an annuity on the two joint lives, and the remainder will be the result required.

Ex. Required the value of an annuity of £60 on the longest of two lives aged 30 and 60; Carliale Table, 4 per cent.

By Table VII., the value of a life aged 30 is 16 852, and of 60, 9 663; and the sum of these, 59515; from which subtract the value of the lives 30 and 60 by Table 1X., 8 620, and the remainder, 17 636, multiplied by 60, gives 10617, or £1061, 14a.

III. Annuities of Table 1 Annuity of an Annuity of Annuity of the 11 Annuities of Annuity of Annuity of the 11 Annuities of Annuity

or £1061, 14s.

III. ANNUTTES ON THREE LIVES.

Case 31. To find the Value of an Annulty on the Joint Continuance of Three Lives.

Rule. Take the value of the Joint lives of the two oldest lives by Case 29, and find in the table for single lives the age of a single life equal, or the most nearly equal, to that value: then find the value of the Joint lives of the youngest and that now found; the result will give the common approximation to the value or quired.

Ex. Required the value of an annulty of £100 on three joint lives, aged 15, 90, and 25 years respectively; Carliale Table, 5 per cent.

The value of the joint lives, 920 and 25, is, by Table IX., 13-398, which, in Table VII. corresponds most nearly with a single life aged 40; and the value of the joint lives, 15 and 40, being by Table IX. 13-901, we have 12-201 x 100 = 1230-1, or £1230, 2s.

the value of the joint lives, 15 and 40, being by Table 1X. 19-201, we have 12-201 × 100 = 1230-1, or £1220, 2s.

Case 32. To find the Value of an Annuity on the Longest of Three Lives.

Rule. From the sum of the values of annuities on all the single lives subtract the sum of the values of annuities on each pair of joint lives, and to the remainder add the value of an annuity on the three joint lives as found by last Case. The result will give the value required.

Ex. Required the value of an annuity of £100 on the longest of three lives, aged 15, 20, and 25; Carliale Table, 5 per cent.

By Table VII. the values of the single lives are for 15, 16-227; for 20, 15-817; for 25, 15-303; and their sum is 47-347. By Table IX. the values of the joint lives are, for 15 and 20, 13-269; for 15 and 25, 13-608; for 20 and 25, 13-398; and their sum 40-935. Also the value of the three joint lives is by preceding Case, 13-201. Hence we have 47-347 — 40-956 + 12-201 = 18-583, the value of annuity of £1 on the longest of the three lives, and 16-583 × 100 = £1858, 6x. the value required.

Case 33. To find the Value of an Annuity granted upon Three Lives on Condition of its cassing as soon as any Two of them become Extinct.

Rule. From the sum of the values of an-

Rule. From the sum of the values of anlisle Table, 4 per cent.

The value corresponding to the ages 26 and 46; the value of the three joint lives.

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Ex. Let the annuity be £100, and the ages 15, 20, and 25 respectively; Carilale Table, 5 per ct. The value of each pair of joint lives is, by preceding Case, 40+965; that of the three join lives is, by Case 31, 12+201; and 40+965 — (12+901 \times 2) = 16+563; hence 16+563 \times 100 = £1656, 6a, the value required. value required.

IV. REVERSIONARY OR SURVIVORSHIP

ANNUITIES.

Case 34. To find the Value of the Reversion of an Estate in Fee, or Perpetual Annuity, after the Death of a Person of a given Age, in a Single

the Death of a Person of a given Age, in a cangle Payment.
Rule. Deduct the value of the assigned life from the perpetuity; then multiply the remainder by the rent or annuity.
Ex. Required the present value of the reversion of an estate of £500 a-year, after the death of a person aged 60; Carlisle Table, interest 6 per cat.
The value of a perpetuity at 6 per cant is 16-667, and of an annuity on a life of 60, 8-304; then 16-667 a 8-304 = 8-305; and 8-365 × 500 = £4181, 10a.
Case 35. To find the Value of the Reversion of an Annuity on a Single Life after another, in a Single Payment.

Case 35. To find the Value of the Reversion of an Annuity on a Single Life after another, in a Single Payment.

Rule. From the value of the life in expectation, subtract the value of the two joint lives.

Ex. A person, aged 50, wishes to purchase an annuity of £100 to his wife, aged 45, after his death, provided she be the survivor; what is the present value thereof; Carliale Table, 4 per C. By Table VII., the value corresponding to 45 is 14:104; from which deducting 10:591, the value corresponding to the lives 45, 50, by Table IX., there remains 5:13; and 3:513 × 100 = 361:3, or £351, 6a., the value required.

To find the value in annual payments: Divide the value in a single payment by the value of an annuity on the joint lives, plus unity. Hence in the above example the annual payment would be 351:3 + 11:591 = 30:306, or £30, 6a. 2d.

Case 36. To find the Value of the Reversion of an Annuity on a Single Life A, after the Longest of Two Lives B and C, in a Single Payment.

Rule. From the sum of the values of an annuity on the single life A, and on the three joint lives, A, B, and C, subtract the sum of the values of an annuity on a sum of the values of an annuity on a substract the sum of the values of an annuity on the single life A, and on the three joint lives, A, B, and C, subtract the sum of the values of an annuity on the sun of the Value of the Bernstein of the A and B, and A and C.

A + ABC — (AB + AC).

$$A + ABC - (AB + AC)$$

A and B, and A and C.

A + ABC — (AB + AC).

Case 37. To find the Value of the Reversion of an Annuity on Two Joint Lives, A B, on the failure of a Single Life, C.

Rule. From the value of an annuity on the joint lives A B, subtract the value of an annuity on the three joint lives, A, B, and C.

lty on the three joint lives, A, B, and C.

AB—ABC.

Case 38. To find the Value of a Reversion of an Annuity on the Longest of Two Lives, A and B, after a Bingle Life, C.

Rule. From the sum of the values of annuities on the single lives in reversion A and B, and of an annuity on the three joint lives, subtract the sum of the values of an annuity on each pair of joint lives, AB, A C, and B C; the difference will give the value required.

A + B + ABC—(AB + AC + BC).

Case 39. To find the Value of the Reversion

life A, subtract the value of an annuity on the three joint lives, A, B, and C. $A \longrightarrow ABC.$

A—ABC.

V. ASSURANCES ON SINGLE AND JOINT LIVES, AND ON THE LONGEST OF TWO LIVES.

Case 40. To determine the present Value of a given Sum, payable on the Death of a person of an assigned Age, or to find how much must be paid annually by a person of an assigned age, that his heirs may receive a given sum on his decease. Rule. Multiply the value of an annuity of £1 on the assigned life by the interest of £1 for one year, and subtract the product from unity; then, dividing the remainder by the amount of £1 for one year, the result will give the value of an assurance of £1; and this last multiplied by the given sum will produce the result required. Ex. Required the present value of £1000, payable on the death of a person aged 47; Carlisle Table, 3 per cent.*

The value of £1 annuity on a life of 47 is here 15-294, which, multiplied by '03, the interest of £1 for one year, gives '48883; and this subtracted from unity leaves '54118; then '5418 + 103 = '95542, and '85549 × 1000 = £525-42, or £525, 8a. 5d., as required.

To find the value in annual payments: Divide the value in a single payment. found as above, by the

To find the value in annual payments: Divide the value in a single payment, found as above, by the value of £1 annuity on the assigned life, plus unity.†

value of £1 annuity on the assigned life, plus unity.†

Hence, in the above example, we shall have
525-42 + 16-394 = 32-246, or £32, 4a. 11d., the
annual premium for an assurance of £1000 on a
life of 47.

Case 41. To find the Value of a given Sum,
payable on the Extinction of either of Two Lives.

Rule. Substitute the value of an annuity on the
joint lives (Case 39), instead of the value of an
annuity on a single life, and proceed as in Case 40.

Case 42. To find the Value of a given Sum, payable on the Extinction of the Longest of Two Lives.

Rule. Substitute the value of an annuity on
the longest of two lives (Case 30), instead of the
value of an annuity on a single life, and proceed
as in Case 40.

VI. Endowments, on Assumances on Sur-Case 43. To find the present Value of a given Sum, payable at the End of a given number of Years, provided the Party assured survive that Period. Rule. Multiply the present value of £1 dis-counted for the given number of years by the probability that the given life will continue that neriod: and the product, multiplied by the

probability that the given life will continue that period; and the product, multiplied by the given sum, will give the value required.

Ex. Required the present value of £100, payable at the end of 10 years, provided a person, now aged 20, be then alive; Carlisle Table, 4 per cent. The present value of £1 to be received at the end of 10 years is 67556, and the probability that a person aged 20 will live that period, is 5442 ÷ 6090. Hence we have 67556 × 5642 + 6090. All the present value of a temporary amulty, plus unity, for one year less than the given term.

VII. DEFERRED AND TEMPORARY ABSURANCES,

ence will give the value required.

A + B + ABC - (AB + AC + BC).

Case 39. To find the Value of the Reversion of an Annuity on a Single Life A, on the failure of the Joint Lives B and C.

Rule. From the value of an annuity on the

^{*} Many of the assurance offices have framed their tables on this basis, but always with an additional per centage, varying from about 10 to 25 per cent. on the computed amount of premium, to defray charges of management, and as a guaranty against contingencies. The addition of 25 per cent., which we observe has been adopted by several young offices, as the British and Colonial, the Commercial, and others, should yield a considerable surplus or profit.—See page 393.
† Unity is added because in life assurances the first annual premium is paid at the date of entry.

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the deferred term; which multiply by the probability of the assigned life attaining that period, and also by£ Idiscountedfor the given number of years.

Ex. Required the value of £100, payable on the decease of a person aged 50, provided he survive 10 years; Carlisie Table, 3 per cent.

The value of an assurance of £100 on a life of 60 (50 + 10), Carlisie, 3 per cent. is (Case 40) 68:530; and as the probability of a life of 50 living to 60 is 3643 + 4397, and £1 discounted for 10 years at 3 per cent. is by Table II. 744094, we have 68:530 × (3643 + 4397) × 744094 = 41:010, or £41, 68. 2d.

To find the value in annual payments during the deferred period: Divide the value in a single payment by unity added to the value of a temporary annuity on the life (Case 28) for one year less than the deferred period.

To find the value in annual payments during the whole life of the assured: Divide the value of £1 annuity on the given life.

Case 45. To find the Value of a Temporary Assurance of a given Sum on a Single Life in one present Payment.

Rule. From the value of an assurance on the whole life subtract the value of a deferred assurance for the given term.

whole hie subtract the value of a deterror assur-ance for the given term. Ex. Required the value in a single payment of a temporary assurance of £100 for 7 years, on the life of a person aged 24; Northampton

on the life of a person aged 24; Northampton Table, 3 per cent.

The value of an assurance of £100 on the whole life of a person aged 24, found by Case 40, is 44710; from which, subtracting 35-047, the value of an assurance of £100 on the same life, deferred for 7 years, found by Case 44, leaves 9.663, or £9, ISa. 3d., as required.

To find the value in Annual Payments: Did the value in a single payment by unity added yide the value in a single payment by unity added

To find the value in Annual Payments: Divide the value in a single payment by unity adde
to the value of a temporary annuity on the life
for one year less than the given term.
VIII. ASSURANCES ON SINGLE LIVES BY A
DEFINITE NUMBER OF PAYMENTS.
Case 46. To find the Value of an Assurance
of a given Sum on a Single Life by a definite
Number of Payments.
Rule. Divide the value of an assurance on the

Kille. Divide the value of an assurance on the whole life, in a single payment, by unity added to the value of a temporary annuity on the life for I year less than the given number of payments. IX. Assurances on Survivorsamp of Livres. Case 47. To find the present Value of a given Sum payable to B, on the Decease of A, provided R unrivia.

B survive A.

To illustrate the rule, suppose A's age to be 32, and B's 24.
Rule. 1st Term. Find, by Case 41, the value of

Rule. Ist Term. Find, by Case 41, the value of £1, payable on the decease of the joint lives 32 & 24. Find, by Case 29, the value of £1 annuity on the joint lives 33 and 24 (that is, taking A at one year older), to which add unity, and multiply the sum by the number living at 33; then divide the product by the amount of £1 in one year multiplied by the number living at 32, and the quotient will give the second term.

3d. Find, by Case 99, the value of £1 annuity on the joint lives 31 and 24 (that is, taking A at one year younger), and multiply this value by the number living at 32, and the quotient will give the third term.

From the sum of the lat and 34 terms subtract the 24 term, and the remainder, multiplied by half

the 2d term, and the remainder, multiplied by half the given sum, will produce the value required. To find the value in Annual Payments: Di-

vide the value in a single payment, found as above, by the value of an annuity on the joint lives, plus unity.

Ex. Required the present value of £400, payable to B, aged 24, on the decease of A, aged 32, provided B be then alive; £arlisie Table, 5 per ct. Proceeding as above directed, the first term will be found to be £'34962; the second £12*809; and the excess of the sum of the 1st and 3d above the 2d, £'39662; which, multiplied by £'300, half the given sum, gives £79.724, or £79, 14s. 6d., the value in a single payment. And dividing this sum by £13*689, the value of an amunity on the joint lives 32 and 24, pius unity, gives £5*3378, the annual payment required.

an annuity on the joint lives 32 and 24, plus unity, gives £5*8372, the annual payment required.

X. VALUATION OF POLICIES.

Case 48. To find the Value of a Policy of Assurance, effected for the whole Term of Life, after any given Period of Endurance.

Ruile. 1st. Find the present value of the sum assured as at the age of valuation; 2d. Multiply the value of £1 annuity on the life at the age of valuation, plus unity,* by the annual premium at entry; the product will give the value of the future annual premiums; 3d. Subtract the value of the future annual premiums; 3d. Subtract the value of the future annual premiums from the present value of the sum assured as at the age of valuation; the remainder will give the value required.

Ex. Required the value (immediately before the premium becomes due) of a policy for £100, effected ten years ago on a life then aged 40; Northampton Table, 3 per cent.

The present value of the sum assured as at 50 (Case 40), is 60.96%. The annual premium for an assurance of £100 on a life of 40 (Case 40), is 3.398; which, multiplied by 13.436, the value of £1 annuity on a life of 50, plus unity, gives 45.656 and 60.966 — 45.656 = 15.210, or £15, 4s. 23d.

If the premium for the 11th year has been just paid, it falls to be added to the above value. Hence in this case 15.210 + 3.398 = 18.608, or £18, 12s. 2d.

N.B.—In valuing the policy the same rate of interest and table of mortality are taken as in

£18, 12a. 2d.

N.B.—In valuing the policy the same rate of interest and table of mortality are taken as in calculating the value of the assurance; but it may be observed that few or none of the offices give the real worth of a policy, thus found, for its surrender; many of them deducting one-half, some one-fourth, others three-fifths.

some one-fourth, others three-fifths.

XI. Valuation of Bonusse.

Case 49. To find the Value of any given Amount of Bonus, declared as an Addition to a Policy. Rule. Multiply the given amount of bonus by the present value of £1, payable on the decease of the party.

Ex. Required the present value of a bonus of £300, the present age of the party being 42; Northampton Table, 4 per cent.

The present value of £1, payable on the decease of a life of 42, is (Case 40) 46777; and 500 × 46777 = 233'885, or £233, 17s. 9d.

Case 50. To find what Reduction of the future Annual Premium is equivalent to any assigned Bonus.

Annual Fremum is equivalent to any assessment Bonus.

Rule. Multiply the annual premium corresponding to the present value of £1 at the given age, by the given amount of bonus; the product will give the equivalent reduction of the future sanual premium.

Ex. Required what reduction of annual premium is equivalent to a bonus of £100, declared on a policy of £1750, effected at the age of 47, the annual premium being £56-43, and the present age of the assured 55 years; Carlisle Table, 3 per cent.

The annual premium corresponding to the present va us of £1 at age 55 is (Case 40) %186019; and (345019 × 100 = 45019, the equivalent reduction of annual premium required. Hence 56:43 — 45:019 = 51:9281, or £51, 18s.7d., the future annual premium. future annual premium.

^{*} Unity is added only if the Policy is renounced immediately before the annual premium becomes due.

TABLE I	. Amount of Bot exceedi	Number of Five.	TABLE II. Present Value of £1 du the End of any Number of Years exceeding Seventy-Pive.						
6 per cent.	5 per cont.	4 per cent.	B per cont.	Years	3 per east,	4 per cent.	5 per cent.	6 per en	
1-060000 1-123600	1.050000 1.102500	1-040000	1-030000	1	-970874 -942598	-961538 -924556	-962381 -907029	94339	
1-123000	1.157625	1-194864	1-092727	3	-915142	-888996	907029	-83961	
1-262477	1-215506	1.169859	1-125509	4	-888487	-854804	-822702	79209	
1 338226	1-276282	1-216653	1-159274	5	862609	-821927	783526	74725	
1·418519 1·503639	1:340096	1-265319 1-315932	1·194052 1·229874	6	*837484 *813092	790315 759918	-746215	70496	
1.593848	1.477455	1.368560	1-266770	7 8	789409	730690	-710681 -676839	66505	
1.689479	1.551328	1.423312	1.304773	ğ	766417	730690 702587	-644609	-59189	
1.790848	1-628896	1.480844	1.343916	10	744094	675564	-613913	-55839	
1·898299 2·012198	1·710339 1·795856	1.539454	1.384234 1.425761	11 12	722421 701380	*649581 *694597	-584679	-52678	
2.132928	1.885649	1 665074	1-468534	13	680951	600574	·556837 ·530321	49696 46883	
2-260904	1-979932	1.731676	1-512590	14	-661118	*577475	-505068	44230	
2-396558	2-078928	1'800944	1.557967	15	·641869	*555264	481017	41796	
2-540352 2-692773	2·182875 2·292018	1.879981 1.947900	1-604706	16	623167	.633908	458112	39364	
2-854339	2:406619	2'025817	1.652848	17 18	-605016 -587395	·513373 ·493628	·436297 ·415521	37136 35034	
3-025599	2-526950	2.106849	1·709433 1·753506	19	·570286	474642	395734	33051	
3-207135	2-653296	2-191123	1-006111	20	-553676	4 5 6 3 8 7	·376889	31180	
3·399564 3·603537	2785963	2-278768	1.860298	21	537549	438834	358942	29414	
3·819750	2-925261 3-071524	2:389919 2:464716	1-916103 1-973587	22 23	-521892 -506892	·421955 ·405726	*341850 *325571	27750	
4.048935	3-225100	2.563304	2-032794	24	491934	390121	-310068	26179 24697	
4-291871	3-386355	2.665836	2-093778	25	·477606	*375117	·296303	23299	
4·549383 4·822346	3·555673 3·733456	2772470	2-156591	96	·463695	360689	•281241	*21981	
5·111687	3-920129	2 883369 2 998703	2-221289 2-287928	27 28	·450189 ·437077	·346817 ·333477	·267848 ·255094	20736	
5-418388	4.116136	3.118621	2-356566	29	424346	*320651	-242946	19563	
5-743491	4-321942	3*243398	2-427262	30	411987	308319	-231377	17411	
6·088101 6·453387	4.538039	3.373133	2-500080	31	•399967	296460	·220359	1642	
6·840590	4-764941 5-003189	3°508059 3°648381	2·575083 2·652335	32 33	*388337	285058	209866	15495	
7·251025 7·686087	5.253348	3'794316	2-731905	34	·377026 ·366045	*274094 *263552	·199873 ·190355	14618	
	5-516015	3-946089	2-813862	35	-355383	253415	181290	13010	
8-147252 0-6060cm	5-791816	4.103933	2.898278	36	345032	243669	172657	12274	
8-636087 9-154259	6*081407 6*385477	4:268090 4:438813	2-985227 3-074783	37 38	·334983 ·325226	·234297 ·225285	·164436 ·156605	11579	
9-703507	6.704751	4.616366	3.167027	39	318784	216621	-149148	10923	
10-28572	7-039989	4.801021	3.262038	40	306557	208289	·142046	09722	
10-90296	7:391988	4-993061	3.359899	41	297628	200278	·135282	*09171	
11·55703 12·25045	7:761588 8:149667	5·192784 5·400495	3·460696 3·564517	42 43	·288959 ·280543	192575	128840	09652	
12-96548	8-557150	5-616515	3.671459	44	272372	185168	·122704 ·116861	*08163 *07700	
13-76461	8-985008	5-841176	3.781596	45	•264430	178046 171198	111297	07265	
14·59049 15·46599	9-434258	6.074823	3-895044	46	256737	164614	105997	*06853	
16:39387	9:905971 10:40127	6·317816 6·570528	4.011895 4.139252	47	·249259	158283	100949	06465	
17:37750	10-09133	6.433349	4-256219	48 49	·241999 ·234950	*152195 *146341	*096142 *091564	*06099 *05754	
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19-52536 90-69689	12-04077		4.515423	51	-221463	135301	-083051	705121	
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23-25502	13-93870	8.313814	4-934125	53 54	202670 202670	120093	·075330 ·071743	104558	
24-65032	14-63563	8-646367	5.082149	55	·19 6 767	115656	068326	04056	
26·12934 27·69710	15·36741 16·13578	8-992222 9-351910	5-234613	56	191036	111207	065073	03827	
29·35893	16-94257	9-725987	5*391651 5*553401	57 58	·185479 ·180070	·106930 ·102817	061974 059023	03610 03406	
31-12046 -	17:78970	10-11503	5-720003	59	174825	196863	*056212	03213	
39-98769	18-67919	10.51963	5.891603	60	169733	195060	*053536	1 *03031	
34-96895 37-06497	19-6131 <i>5</i> 90-59380	10-94041 11-37803	6.068351	61	164789	*091404	-050986	*02859	
39·28887	21-62349	11.83312	6-250402 6-437914	62 63	·159990 ·155330	*087889 *084508	-048558 -048246	02698 02545	
41-64620	22-70467	12-30648	6.631051	64	150806	081258	-044044	02545	
44·14497 46·79367	23.83990	12-79874	6.829983	65	146413	-078133	*041946	*02265	
46*79367 49*60129	25·03190 26·28349	13:31068	7:034882	66	142149	-075128	1039949	02137	
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89-07593	30-42643	15-57162	7-687206 7-917822	70	·126297	-064219	*032866	01692	
62·62049 66·37772	31-94778 33-54513	16:19448 16:84226	8-155357	71	129619	061749	031301	01596	
70-36038	35-22239	17:51595	8·400017 8·652018	72 73	·119047 ·115580	*059374 *057091	*029811 *028391	*01506	
74-58200	36-98351	18-21659	8.911578	78 74 75	112214	-054895	1028391	*01421 *01340	
79-05692	38-83269	18-94525	9-178926	75	108945	-054895 -052784	025751	101264	

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2-000000	TABLE II the End ceeding 8	IL Amount of any Nur leventy-Pive				TABLE IV. Present Value of £1 Annum for any Number of Years exceeding Seventy-Five.					
6-976319 6-901913 6-93897 7-95898 7-95	1-0000000 2-060000	1-000000 2-050000	2-04/:000	2-030000	3	1-913470	•961538 1•886095	1.859410 2.723248	*943396 1-833393		
## ## ## ## ## ## ## ## ## ## ## ## ##	4.374616						3-629895	3-545950 4-900457	3.465106		
9-39338 9-148908 7-998349 7-993462 7 6-230233 6-002035 8-78573 5-59239 1 11-91533 11-93536 10-58299 10-12911 9 7-7861109 7-435533 7-1071923 6-101929 11-149133 11-93536 10-58299 10-12911 9 7-7861109 7-435533 7-1071923 6-101929 11-149141 12-97789 13-48633 12-97798 1 3-5535824 8-760477 8-364614 7-286473 13-48633 12-97798 13-5535824 8-760477 8-364614 7-286473 13-48633 12-97798 13-5535824 8-760477 8-364614 7-286473 13-48633 12-97798 13-5535824 8-760477 8-364614 7-286473 8-365384 8-760477 8-364614 7-286473 8-364824 8-760477 8-364614 7-286473 8-364824 8-760473 8-364614 7-286473 8-364824 8-760473 8-364614 7-286473 8-364824 8-760473 8-364614 7-286473 8-364824 8-760473 8-760473 8	6-975319			6-468410	6			5-075692	4-917324		
11-9132	8.393838		7-696294			6 ·23 0283		5·786373			
14-91679	11.49132		10-58280		9						
16-9894 18-91/13 13-02881 14-19473 12-934004 9-38274		12:57789	12:00611				8-110896		7-360087		
\$\frac{9}{2} \frac{9}{2} \frac{1}{2} \frac	16.96994	15-91713	15-02581	14:19203	12	9-954004	9-385074	8.963252	8.383844		
25-27667 21-57855 20-52359 16-5961 15 11-5794 11-11539 10-57956 17-1259 16-6725 10-10596 19-71259 11-52530 10-5775 10-10596 19-71259 11-52530 10-5775 10-10596 19-71259 11-52530 10-5775 10-10596 19-71259 11-52530 10-5775 10	18-88214	17-71298		15 61779				9-393573	8.852683		
95-97283 32-66740 21:93433 20-15/88 16 12:95110 11:5330 10-87.77 10-10.966 92-1288 22:948407 33-95066 82-13253 25-64641 33-4144 18 13:75.551 12:6567 11:2447 10-67296 30-90665 82-13253 25-64641 33-4144 18 13:75.551 12:56390 11:63:950 11-63:950 36-76.559 33-05.950 82-77818 53-1887 19 14:83:380 12:13394 12:90533 11-63:950 11-63:950 36-76.559 33-05.950 82-77818 53-1887 19 13:4518 12:56350 12:45261 11-63:05 11			20.02359	18-59891			11-11839		9-294984		
30-90665 89-13838 25-96401 25-1487 19 14-3280 13-15390 11-05269 10-02269 30-76892 33-76896 33-76896 32-779108 35-71895 33-76896 33-76896 32-779108 35-71895 33-76896 33-76896 32-779108 35-71895 33-76896 32-77810 35-77817 29 14-67747 13-56053 13-6221 11-6606 44-768063 33-71895 33-76896 34-74797 35-53-778 22 15-95698 14-6211 13-6112 11-6606 44-768063 34-74797 35-53-778 22 15-95698 14-6211 13-6112 11-6606 34-79814 14-6208 34-76816 32-1154 34-7817 13-76848 14-6208 35-11545 44-71815 38-55514 26 17-41316 14-6208 13-7864 12-85536 68-16538 51-11345 44-73174 38-55514 26 17-767684 18-6277 14-37519 13-00317 79-05819 84-6258 49-65758 42-72892 28 18-76411 16-6206 14-78934 13-95037 79-05819 84-6258 49-65758 42-72892 28 18-76411 16-6206 14-7894 13-95037 79-05819 84-3585 56-68044 47-74752 30 19-60044 17-2983 15-3451 13-9683 14-6268 89-32834 48-60688 31-90835 36-70847 42-6276 33 32-7688 38-76891 84-6268 89-32834 48-60688 31-90835 77-68051 89-32834 48-60688 31-90835 77-68051 89-32834 48-6068 89-32834 48-6068 89-32834 48-60688 31-90835 77-68051 67-3285 89-32854 48-6068 89-32854 48-6068 89-32854 48-6068 89-32854 48-6068 89-32854 48-6068 89-32854 48-6068 31-90835 77-68051 67-76879 89-62654 77-68051 67-76879 89-62654 77-68051 67-76879 89-62654 77-68051 67-76879 89-62654 77-68051 67-76879 89-62654 77-68051 67-76879 89-62654 77-68051 67-76879 89-62654 77-68051 67-76879 14-7680 13-76863 13-76	25-67253	23-65749	21-82453	20-15688	16	12-56110	11-65230	0.83777	10-10590		
3379899 30-53000 27-67123 25-11-877 19 14-53390 15-13-504 12-0852 11-1-6692 30-99273 30-79925 30-99273 30-79925 31-96920 25-67-649 21 14-61-97 13-50-533 12-69271 11-6692 46-99663 41-53048 36-61-89 32-45-88 23 16-4-361 14-61-84 13-16-97 11-61-61-64 46-99663 41-50-50 30-9820 32-45-88 23 16-4-361 14-61-84 13-16-97 11-61-61-64 46-99663 41-50-50 30-9820 32-45-88 23 16-4-361 14-61-84 13-16-97 12-61-65 46-96-65 11-15-61-61-65 26-16-63 51-11-54-64 47-17-10-41-64 13-16-97 12-61-65 46-96-65 11-15-61-65 46-96-16-63 51-11-15-64 47-17-17-64 13-16-16-05 26-16-63 51-11-15-64 47-17-17-17-17-65 26-16-63 51-11-15-64 47-17-17-17-65 26-16-63 51-11-15-64 47-17-17-17-65 26-16-63 51-11-15-64 47-17-17-17-65 26-16-63 51-11-15-64 47-17-17-17-17-17-17-17-17-17-17-17-17-17				23:41444	18	13-75351		1.68959	10-47726		
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33-30299 38-5082 34-4797 30-3478 92 16-93592 14-45112 15-600 19-4116 46-90853 34-5845 14-58464 17-8579 19-30239 34-5845 14-58464 17-8564 17-8564 17-85638 34-5845 17-8564 17-8564 17-8564 17-85638 34-5845 17-8564 17-8564 17-85638 34-5845 17-85638 34-5845 17-8564 17-8564 17-85638 34-5845 34-5845 34-5				26:87037 98:67040	91				11-46992		
Su-91588 44-95900 39-9890 34-9459 34-9459 34-9459 34-95038 34-9459 34-9459 35-49596 34-9459 35-49596 34-9459 35-49596 34-9459 35-49596 34-9459 35-49596 34-9459 35-49596 34-9459 35-9459 37-94599 37-94590 36-3271 32-9659 42-9399 38-94590 31-94596 31-	43:39229	38-50521	34-24797	30:53078	22	15-93692	14:45112	3.16300	12-04158		
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176-9565 135-2318 104-184 45-8239 42 2370136 20-1863 74-891 15-28464 187-825 116-184 45-8239 48 24-2847 20-5885 26-6081 168-6852 126-6706 45-6046 47-77-48 17-78-77 15-4858 226-5645 188-194 132-945 40-305 47-825 121-1966 178-1194 132-945 40-305 47-825 121-1966 178-194 132-945 40-305 47-825 121-1966 178-194 132-945 40-305 47-825 121-1966 178-194 132-945 40-305 47-825 121-1966 178-194 132-945 40-305 47-825 121-1966 178-194 132-945 40-305 48-825 128-6803	165-0477	127-8398				23'114//	19*99305	17 29437	15.13805		
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256:5645 188:0254 139:2633 10:4404 48 25:56971 21:1913 180.716 15:65003 29:729564 194:4583 10:4406 49 25:56971 21:1913 180.716 15:70757 290:3359 209:3480 155:6671 11:197569 60 25:72976 21:48:18 18:25393 15:76136 51:308:252-2814 232:8569 167:1647 191:9508 59 25:16524 21:7458 18:16972 15:70757 208:2522 208:2524 10:74:861 19:7528 10:74:861 10:7528 10:74:861 10:7528 10:74:861 10:7528 10:74:861 10:7528 10:74:861 10:7528 10:74:861 10:7528	941-0988	168 6859 178-1194				94'77545		17'88007 17'98102	15.52437		
339-3814 233-3869 167-1647 121-9868 39-16534 217-4788 18-1107 18-8140 13-9679 370-9170 258-7739 183-8454 131-1375 84 96:97796 91-10-95 18-6515 18-9496 91-10-95 973-718 191-1599 136:0716 55 96-7743 92-10-95 18-6515 18-9496 418-9323 987-3489 191-1599 136:0716 55 96-7743 92-10-95 18-6515 18-9496 418-9323 987-3489 191-1598 136:0716 55 96-7743 92-10-95 18-6514 18-9496 418-9323 987-3489 199-8055 141-1538 56 96-9656 92-91-989 18-6054 16-02-881 18-1478 18-1477 98-7787 116-3844 77 97-150-94 92-92-97 18-70-95 18-02-95 18-00-54 16-02-881 18-1478 18-1479 18-14780 98 97-9310 97-9329 18-00-54 18-02-95 18-00-54 18-02-95 18	256-5645	188-0254	139-2632	104-4084	48	25·26671	21-19513	18/07716	15-65003		
339-2814 233-28692 167-1647 121-9868 53 297-16694 21-74-788 18-41007 18-96140 348-9783 348-97	272-9584 900-3350	198·4267	1.59-6671	119-7960			21:34147	18*16872			
339-3814 233-3869 167-1647 121-9868 39-16534 217-4788 18-1107 18-8140 13-9679 370-9170 258-7739 183-8454 131-1375 84 96:97796 91-10-95 18-6515 18-9496 91-10-95 973-718 191-1599 136:0716 55 96-7743 92-10-95 18-6515 18-9496 418-9323 987-3489 191-1599 136:0716 55 96-7743 92-10-95 18-6515 18-9496 418-9323 987-3489 191-1598 136:0716 55 96-7743 92-10-95 18-6514 18-9496 418-9323 987-3489 199-8055 141-1538 56 96-9656 92-91-989 18-6054 16-02-881 18-1478 18-1477 98-7787 116-3844 77 97-150-94 92-92-97 18-70-95 18-02-95 18-00-54 16-02-881 18-1478 18-1479 18-14780 98 97-9310 97-9329 18-00-54 18-02-95 18-00-54 18-02-95 18	308-7561	220.8154	159-7738	117-1808	51	25 95 123	21 61749	18:33898	15.81308		
370-9170 258-7739 188-8454 131-1375 34 95:07766 21:04296 18:0515 18:04998 1891-1599 36:0716 55 25:7745 23:10661 18:0347 15:99054 18:0456 18:0454 18:0456 18:04			167-1647			96°16694	21 74758				
394-1730	370-9170	258-7739	182-8454	131-1375	54	26.57766	21 99296	18:56515	15-94998		
444-9617 309-7167 206-7978 146-3884 57 37-15094 29-32678 18-7088 16-06498 478-6488 319-8514 218-1497 151.7800 88 97-33101 39-249967 18-7084 46-16-0998 809-0077 335-7940 297-8777 157-3334 59 97-90583 297-8983 335-5837 277-9007 163-0634 60 97-90583 297-8249 18-9078 18-9078 16-16143 586-1109 37-2-3299 249-5103 18-39-450 61 97-94035 297-9408 18-12-33 63 298-9407 17-50134 69 39-00034 29-39-278 19-12-38 16-10103 638-1478 11-4699 270-5288 181-2338 63 29-18-567 29-28-39 19-12-38 16-10103 63 29-30648 29-308-38 19-11-38 16-21-701 67-28-38 18-12-38	394-1790	272-7126		136 0716		2677443					
478-6486 318-6514 218-1487 1517800 58 27:33101 22:42967 18:818-64 16:00908 50:00-0077 355-7940 27:78:79 157:3334 59 27:6053 32:78284 38:975 16:13111 535:1989 353:5637 27:9007 163:0634 60 27:67556 22:8284 38:9755 16:13111 535:1989 353:5637 27:9007 163:0634 60 27:67556 22:8284 38:9755 16:13111 535:1989 353:5637 27:9007 163:0634 60 27:67556 22:8284 38:9755 16:13111 535:1989 353:5637 29:0907 17:50134 62 28:00034 22:79297 19:2083 16:1003 28:1701 638:1476 412:4699 27:0598 181:2638 63 28:16567 22:88729 19:07508 16:1903 28:0616 27:4857 23:0848 22:90885 19:1919 16:24246 677:4357 343:0353 28:3619 187:7017 64 28:3048 22:90885 19:1919 16:24246 71:94899 456:7990 29:40894 194:3338 65 28:45289 23:14686 19:16107 16:28012 763:2278 480:6379 307:7671 20:11627 60 28:99604 23:12181 19:20107 16:30168 856:0238 531:9033 33:19778 208:1976 67 28:99604 23:12181 19:20107 16:30168 856:0238 531:9533 33:19299 21:4436 82:86704 23:25331 19:27500 16:34967 967:9329 589:5385 34:2905 230:5941 70 29:12342 23:3303 19:27503 16:34967 967:9329 589:5385 34:2905 230:5941 70 29:12342 23:3303 19:3498 16:36762 967:9329 589:5385 34:2905 230:5941 70 29:12342 23:3304 19:3498 16:36864 1089:628 650:9027 360:0566 246:6672 72 29:36609 23:1564 19:37398 16:40051 1089:628 650:9027 360:0566 246:6672 72 29:36609 23:1564 19:37398 16:40051 1089:628 650:9027 360:0566 246:6672 72 29:36609 23:1564 19:4379 16:41586 1166:006 684:4478 412:9688 28:50:073 73 29:48067 23:27573 19:4398 16:43979 1296:36769 23:57573 19:4398 16:43979 1296:36769 23:57573 19:49529 16:43390 116:43979 1296:36769 23:57573 19:49529 16:44330 116:43979 139:9688 116:43979 139:9688 116:43979 139:9688 116:43979 139:9688 116:43979 139:9688 13:26768 13:26768 13:46969 1	444-9517	302-7157	208-7978	146-3884	57	27:15094	22 32675	18 70052	16.06492		
\$353-1989	479-6488	318-8614	218-1497	151 7800	58	27:33101	22'42957	18-81954	16-09898		
169 169		353-5837	237-9907	163-0534		27 60583 27 67556		18-92929			
6381478 412+4699 270-6268 161-2638 63 28-18677 28-286728 19-191913 16-92647 719-0839 456*7930 294-9694 194*338 65 28-36648 22-96865 19-119191 16-96847 719-0839 456*7930 294-9694 194*338 65 28-36869 23-04668 19-16107 16-28912 1610-0215 506*6998 321-0778 2908-1976 67 28-28305 23-19405 19-2907 16-33065 856*0238 531-953 331-9299 215-4436 68 28-86704 23-12181 19-2907 16-33065 856*0238 531-953 331-9299 215-4436 68 28-86704 23-253303 19-2907 16-33065 967-9329 588-5285 364-2905 230-5641 70 29-12342 23-33451 19-24398 16-36762 967-9329 588-5285 364-2905 230-5641 70 29-12342 23-33451 19-34988 16-38454 1088-629 650-9027 366-0666 246-6672 72 29-36669 23-1664 19-37398 16-40061 1088-629 650-9027 366-0666 246-6672 72 29-36609 23-1664 19-37398 16-40061 1166-006 684-4478 412-9688 255-0673 73 29-34607 23-257273 19-43218 16-42979 1296-367 719-6708 430-4148 285-7103 74 29-9689 23-26769 23-26769 24-4639 16-44379 16-44380	566·1159	372-2629	248-5103	168-9450		97-84035	2271489	18-99028	16-19003		
677'4367 434'9933 289'6619 187'7017 64 28'30648 22'96845 19'11912 16'26647' 719'0890 456'7980 294'9684 194'3339 65 28'46299 23'74688 19'11017 16'26812' 763'2878 480'6379 30'7'671 20'11627 66 38'95050 32'12111 19'20102 16'31049 810'0215 605'9632 321'4778 208'1176 67 28'73305 23'12111 19'20102 16'31048 6856'6223 331'9533 334'9209 215'4436 68 28'95704 23'26351 19'27530 16'34967 912'9002 555'05100 349'3177 22'29'059 68 28'95712 23'33030 19'30981 19'27530 16'34967 103'7'008 618'9549 38'4955 23'75841 70 22'12342 23'33040 19'30981 68'306'87 103'7'008 618'9549 38'9621 23'85811 71 29'34604 23'46636 19'37'398 16'40051 1168'056 650'927 396'0566 246'6672 72 29'36509 23'1564 19'43'94 16'4058 1166'05 684'4478 412'9688 28'50'673 73 29'4807 23'57273 19'43218 16'42979 1126'357 719'5708 430'4148 28'37'183 74 29'96988 23'7682 19'45922 16'443'9		412.4699	270-8288	181-2638					16.31701		
763°8278 480°8379 307′7671 201°1627 66 39°95004 23°12181 19°20102 16°31049 810°0315 505°6508 521°4778 208°1976 67 38°73305 23°19406 19°2907 16°33049 912°3002 550°5510 349°3177 22°29009 69 28°89712 23°33030 19°30981 19°27530 16°34687 957°4322 588°5285 342°395 230°5941 70 29°1342 23°33030 19°30481 19°3488 16°3669 1089°629 560°9917 306°0566 946°672 72 29°36699 23°1564 19°37386 16°4097 1166°006 684°4478 412°9688 385°0673 73 29°48067 23°57273 19°43218 16°43979 1296°367 719°6708 430°4148 48°378°19 74 29°9988 23°4783 19°4592 16′44390	677:4367	434-0933	282-6619	187-7017	64	28-30648	22*96855	19-11912	16-26647		
810-0915 506-6998 321-0778 206-1976 67 3873305 23-19405 19-23907 16-33065 368-6929 531-9533 334-999 215-4438 68 28-95704 23-26351 19-27530 16-34967 912-9002 539-5310 349-3177 222-9009 69 28-99712 23-33030 19-30981 16-36762 367-623 368-5286 364-2905 329-5811 70 29-12342 23-33451 19-34986 16-36762 368-5286 379-6021 238-5119 71 29-94604 23-4628 19-34986 16-36763 486-6672 72 29-36809 23-51564 19-40379 16-41558 1166-006 684-4478 412-6988 23-50673 32-48067 23-87273 19-43218 16-42979 1236-367 719-6702 430-4148 263-7193 74 29-9298 23-68769 23-68769 24-68762 2	719*0099 763*9979	456°7980 480-8379	307-7671								
886-6223 531-9633 531-9209 121-4436 68 28-86704 23-925361 19-27530 16-34967 1912-9002 530-5510 349-317 222-9009 69 28-99713 23-33303 19-30981 16-36762 967-9329 588-5286 364-9206 230-5541 70 29-12342 23-33451 19-34988 16-38454 1087-608 618-9549 379-9621 238-5119 71 29-34604 23-45626 19-37398 16-40851 1088-629 650-9027 366-0566 946-6672 72 32-36609 23-5164 19-40379 16-40568 1156-006 684-4478 412-9688 23-50673 73 29-48067 23-57273 19-43218 16-42979 1296-367 719-6709 430-4148 263-7183 74 129-9298 23-62762 19-45929 16-44330	810-0215	505-6698	321-0778	208-1976	67	28:73305	23-19405	19-23907	16:33065		
967743992 588-53285 364-9905 230-5941 70 29-12349 23-39451 19-34968 16-38454 1087-908 618-9549 379-9621 238-5119 71 39-34604 23-46626 19-37396 16-40051 1089-629 650-9027 366-0665 246-6672 72 29-36609 23-51564 19-40379 16-41568 1156-005 684-4478 419-9688 23-50-673 72 39-48067 23-67273 19-43218 16-42979 1296-367 719-6709 430-4148 263-7193 74 129-9698 23-68768 19-46929 16-44390			334-9209	999-0000	68	28 86704		19:27530 10:300e1	16:34967		
1089-829 650-9027 396-0566 946-6672 72 39-36509 93-51564 19-40379 16-41558 1156-006 684-4478 412-6968 925-0673 73 92-38067 23-87273 19-43218 16-42979 1226-367 719-6709 430-4148 263-7193 74 929-8928 23-82762 19-45922 16-44530	967-9322	588-5285	364-2905	230-5941	70	29-12342	23-39451	19:34268	16.38454		
1156-006 684-4478 419-9988 255-0673 73 29-48067 23-57973 19-43918 16-43979 1296-387 719-6702 430-4148 263-7193 74 29-8928 23-92769 19-45922 16-44320 1300-949 756-6337 448-6314 279-6309 75 29-70183 23-68041 19-48407 16-45886		618-9549	379-9621	238-5119	71				16:40081		
1226-367 719-6702 430-4148 263-7193 74 29-99288 23-92763 19-45922 16-44320 1300-949 756-6337 448-6314 279-6309 75 29-70183 23-68041 19-48407 16-45886	1156-006	684-4478	412-8988	255-0673	1/3	29-48067	23-5/273	19.43218	16.42979		
10.40080 18.48401 18.48404 18.40080 18.48404 18.40080		719-6702	430:4148	263-7193	74	29-59288	23-62762	19-45922	16.44320		
Value of Perpetual Annuity [33:33333 25:00000 20:00000 16:6067	1300.848					33-33333	25-00000	20-0000	16.40080		

T.	TABLE V. Exhibiting the Annual Decrements of Life, or Law of Mortality, according to Observations made at Northampton and Carliele.																	
اء	Persons	Living.	١.	Persons	Living.	Ι.	Persons Living 9			Persons Living			Persons Living			Porses	Persons Living	
7	North- ampion.	Cur-	4	No-th-	Cor-	4	North-	Car-	1	North- ampt	Cer- lisle.	ŧ	North-	Car- Male.	+	North-	Car- Hele.	
0	11650	10000	18	5262	6176	36	3935	5307	54	2530	4143	71	1159	2277	88	83	232	
1	8650	8461		5199	6133	37	3960	5251	55		4073	72	1072	2143	89	62	181	
2	7283	7779	20	5132	6090	38	3785		56	2366	4000	73		1997	90	46	142	
3	6781	7274		5060	6047	[39	3710		57	2284	3924	74	912	1841	91	34	105	
•	6446			4985	6005	40			58	2202	3849	75	832	1675	92	24	75	
5	6249	6797		4910	5963	41		5009			3749	76	752	1515		16	54	
6	6065	6676		4835	5921	42		4940			3643	77	675	1359	94	9	40	
7	5925	6894		4760	5879	43	3404	4869	61	1956		78	603	1213	95	4	30	
8	5815	6536		4685	5836	#	3326		62		3398	79	534	1081	96	1	23	
10	5735	6493		4610	5793	45	3948		63		3268	80	469	953	97	••	18	
ii	5675	6460		4535	5748	46	3170	4657	64	1719	3143	81	406	837	98	•••	14	
12	5623 5573	6431	89	4460 4385	5696	47 48	3092 3014		65 66	1632		83	346	725	99 100	••	11	
13	5523	6400 6368		4310	5642 5585-	49		4458		1552		83	289	623	101	••	9	
14	5473	6335		4235	5528	50	2857	4397	1 88	1392		84 85	234 186	529 445	102	••	7	
15	5423	6300	33	4160	5479	51		4338	69		2525	88	145	367	103	••	•	
16	5373	6261	34	4085	5417	25	2694	4276				87	iii	296	104	••	ះ	
17	5390	6219		4010	5369	53		4211		1200		۳,	***	-50		i I	- 4	

TAE	TABLE VI. Value of an Annuity of £1 on a Single Life (or Number of Years' Purchase of an Annuity), according to the Probabilities of Life at Northampton.													
4,54	3 per rest.	4 per cent.	5 per cent.	6 per cent	Age	3 per en L	4 per cent.	5 per cent	6 per cent.					
o	12-270	10-327	8-963		48	12-951	11-685	10.616	9-707					
ĭ	16-021	13-465	11.563	10-107	1 40	12-693	11-475	10-443	9-563					
9	18-599	15-633	13-420	11-724	50	12-436	11-264	10-269	9-417					
3	19-575	16-462	14-135	12:348	51	12-183	124.67	10-097	9-273					
4	20-210	17-010	14-613	12-769	59	11-930	10-849	9-925	9-129					
5	20.473	17-248	14-827	12-962	53	11-674	10-637	9-748	8-980					
6	20-727	17.482	15-041	13.150	54	11.414	10.421	9-567	8-897					
7 8	20-853	17-611	15-166	13-275	55	11.120	10-201	9-302	8-670					
8	20.882	17-662	15-226	13:337	56	10.883	9-977	9-193	8.509					
9	20-812	17-625	15-210	13.335	57	10.611	9749	8-999	8-343					
10	20-663	17-523	18-139	13-285	58	10.337	9.516	8-901	8-173					
11	20.480	17:393	15-043	13-212	59	10.088	9-280	8-599	7-999					
18	20-283	17-251	14-937	13-130	60	9.777	9-039	8-392	7-890					
13	20.081	17-103	14.896	13-044	61	9.493	8-795	8-181	7-637					
14	19-872 19-657	16-950	14.710	12-953 12-857	62 63	9°205 8°910	8-547 8-291	7-966 7-742	7-449 7-253					
15	19-657	16·791 16·625	14-588	12.755		8.211	8-030	7-742	7-052					
16	19-218	16.463	14·460 14·334	12-655	64 65	8'304	7761	7.276	6-841					
17 18	19-013	16.309	14-217	12-562	66	7:994	7.488	7-034	6-625					
19	18-820	16-167	14-108	12.477	67	7:682	7-211	6.787	6-105					
20	18-638	16:033	14-007	12:398	68	7:367	6-930	6.636	6-179					
ี้ 20	18-470	15-912	13.917	19-329	69	7-051	6 647	6.281	5-949					
22	18-311	16797	13.833	19-265	70	6.734	6.361	6.023	5-716					
23	18-148	15-680	13-746	12-200	71	6.418	6.075	5.764	5-479					
24	17-983	18-500	13-658	12-132	72	6-103	5790	5.504	5-241					
25	17.814	15.438	13.567	12-063	73	5-794	8-507	5-245	5-004					
96	17-649	15.313	13.473	11-992	73 74	5-491	δ •230	4-990	4.769					
27	17-467	15-184	13'377	11-917	75	5-199	4.962	4-744	4-549					
28	17-289	15-053	13-278	11-841	76	4-925	4710	4.511	4-326					
29	17-107	14-918	13.177	11-763	77	4-652	4.457	4-277	4-109					
30	16-922	14-781	13472	11-689	78	4.372	4.197	4-035	3.884					
31	16-732	14-639	12 965	11-598	76 77 78 79	4-077	3-921	3:776	3-641					
39	16-540	14-495	12.854	11.218	80	3781	3643	8-515	3:394					
33	16-343	14:347	12740	11.428	81	3.499	3.377	3-263	3-156					
34	16-149	14-195	12.623	11.331	82	3-229	3-122	3-090	2-926					
35	15-938	14-039	12.208	11 236	83	2-982	2-887	2.797	2713					
36	15-729	13-890	12.377	11.137	84	2.793	2.708	2-627	9-551					
37	15.515	13-716	12-249	11.038	85	2-620	2.543	2.471	2.402					
38	15-298	13.548	18-116	10.929	86	2.462	3-383	2.328	2.206					
39	15-075 14-848	13.375	11-979	107819	87	2.312	2-251	2-193	2-138					
40 41	14-620	13-197	11.837	10.705	88	2.185	9-131	2:000	2°031					
42	14-391	13·018 12·838	11.699 11.991	10°589 10°473	89 90	24113	1·967 1·758	1-924 1-723	1.088					
43	14-169	12-657	11.407	10 473	91	1·794 1·501	1.474	1.447	1.455					
44	13-929	12-472	11.528	10 356	92	1.130	1.171	1.123	1.136					
45	13-692	12-283	11.102	10.110	93	1130	-827	17103	1 100					
46	13.450	12-089	10'947	97990	94	.536	-530	-524	·518					
47	13-203	11-890	10 784	9.846	95	-242	240	-238	-236					
	, r-10 to	11 000	·V / (07)	<i>3</i> 040	<u> </u>	272	240	200	200					

TAB	TABLE VII. Value of an Annuity of £1, on a Single Life (or Number of Years' Purchase of an Annuity), according to the Probabilities of Life at Carlisle.													
Age	S per cent	4 per cent.	5 per cent.	6 per otest	Age	3 per cent.	4 per cent.	5 per cent.	6 per cent.					
0	17:320	14-283	12-083	10.439	52	13-558	12-258	11-154	10-208					
1	20-085	16-556	13-995	12-078	63	13-180	11.945	10-892	9-968					
2	21-501	17-728	14-963	12-925	54	12-798	11 627	10-694	9-761					
3	22-683	18.717	15-824	13-652	55	12-408	11.300	10-347	9-524					
4	23-285	19-233	16-271	14-049	56	12-014	102966	10-063	9-280					
8	23-693	19-594	16-590	14.395	67	11-614	107625	9-771	9-027					
6	23-846	19-747	16.735	14.460	56	11-218	10.386	9-478	8.772					
7	23.867	19-792	16790	14.218	59	10-841	9.963	9-199	8-529					
8	23.801	19-766	16.786	14-526	60	10-491	91663	8-940	8:304					
10	23 677	19-693	16742	14.500	61 69	10-180	9.398	8-719	8-108					
ii	23-512	19-585	16 669	14.448	63	9-875	9137	8-487	7-913					
12	23"327	19:460	16.581	14:384	1 84	9·567 9·246	8'872 8'593	8-258	7714					
13	93°143 22°957	19 ·336	16.494	14-957	65	8-917	8'307	8-016 7-765	7·502 7·281					
14	22 769	19-082	16.316	14-191	ĕ	8-678	8.010	7.503	7:049					
15	22.983	18-956	16-227	14-126	67	8-228	7700	7.227	6.803					
16	22.404	18-837	16-144	14.067	68	7-869	7 380	6-941	6.246					
17	22.535	18-793	16-066	14-019	69	7.499	7'049	6-643	6.277					
18	22'058	18-608	15-987	13-956	70	7-123	6709	6.336	5-998					
19	21 879	18-488	15-904	13.897	71	6737	6'358	6.012	5-704					
20	217694	18-363	15-817	13.835	78	6.373	6.056	5711	5-424					
21	21.204	18 233	15-726	13.769	73 74	6.044	5725	5.435	5-170					
22	21 '304	18 095	15 628	13.697	74	5.752	5'468	5.190	4-944					
23	\$1,088	17:951	15.22	13.631	75	5.512	5°239	4-989	4-760					
94	20*885	17 901	18.417	13.241	75 76 77	5-277	5'094	4792	4-579					
25 26	20165	17.645	15.303	13.456	77	5-059	4'825	4.609	4-410					
	20'442	17:486	15-187	13:368	78 79	4.838	4.622	4.422	4-238					
27 28	20*212	17:320	15-065	13.275	80	4-592	4.394	4.210	4-040					
29	19'981	17'184	14-942 14-827	13·182	8i	4·365 4·119	4.183	4.015	3-858					
30	19761 19556	16-997 16-859	14 723	13 090	89	3.888	3°953 3°746	3·799 3·606	3-656 3-474					
31	19'348	16 705	14.617	12.343	83	3-672	3.534	3'406	3-296					
36	19:134	16.22	14.208	12.860	84	3-454	3-329	3.211	8.102					
35	18-910	16:390	14.387	12.771	85	8-229	3-116	3.009	2.909					
34	18-675	16-219	14.260	12 675	86	3.033	2-928	2.830	2.739					
35	18-433	16.041	14.127	12.223	87	2-873	2.776	2.685	2-599					
36 37 38	18-183	15.856	13'987	12.465	88	2776	2.683	2.597	2.515					
37	17-928	15.666	13'843	12'354	89	2-665	2-577	2.495	2-417					
38	17-669	15-471	13.695	12.538	90	2-499	2416	2-339	2-266					
39	17:405	15.272	13'542	12-120	91	2-481	2-398	2.351	2-248					
40	17-143	15'074	13*390	12.003	92 93	2.577	2-492	9'419	2.337					
41	16-890	14.883	13.245	11.890	94	2-687	2.600	2.218	2-440					
49 43	16.640	14.694	13'101	11.779	95	2736	2.660	2.269	2-492					
44	16:389	14.202 14.208	12°957 12°806	11°668	96	2·757	2.674 2.628	2°596 2°555	2-522 2-486					
45	15-863	14.104	12 648	11.428	97	2*704 2*559	2-492	9°428	2:368					
46	15.282	13-889	12'480	11.396	96	2.388	2-333	2.848	2-227					
47	15-294	13-662	12:301	11.124	99	2-131	2-087	2045	2-004					
47 48	14-986	13-419	12-107	10.888	100	1-683	1.663	1.624	1.596					
40	14-654	13:153	11.892	10.853	ioi	1-228	1-210	1.185	1.175					
50	14:303	12-969	11-660	10.631	102	771	762	753	744					
51	13-939	12-566	11.410	10.422	103	-324	-321	317	•314					

TABLE VIII. Value of an Annuity of £1 on a Single Life (or Number of Years' Purchase of an Annuity), according to the Probabilities of Life among the Government Annuitants; reckoning Interest at the rate of δ per cent. per Annum.

Aga	Male.	Female.	Age	Male.	Female.	Age.	Male.	Pemale.	Ago.	Male.	Female.			
14	15-614	16-336	29	14-475	15:302	44	12-581	13-713	59	9-226	10-597			
15	15-484	16-244	30	14-393	15-216	45	12:302	13-568	60	8-995	10-330			
16	15.356	16-174	31	14:306	15-126	46	12-192	13.414	61	8752	10-059			
17	15-235	16-112	32	14-214	15-033	47	11-976	13-251	62	8-494	9-766			
18	15-125	16-054	83	14-114	14-938	48	11-749	13-080	63	8-225	9.476			
19	15-031	16-000	34	14-007	14-849	49	11.515	12-900	64	7-954	9-181			
20	14-950	15-946	35	13-892	14-744	50	11-274	12-710	66	7.682	8.884			
21	14-883	15-886	36	13770	14-648	51	11-032	19-508	66	7.409	8.584			
22	14-840	15-824	37	13-643	14.549	59	10-797	12-295	67	7-153	8-284			
23	14-803	15-759	38	13.512	14.447	83	10.564	12.073	68	6-900	7-982			
24	14-766	15-691	39	13.376	14.339	54	10:336	11-842	69	6.648	7-676			
25	14727	15-619	1 40	13-235	14-227	55	10-112	11-604	70	6.399	7.369			
26	14-683	15-544	41	13-067	14-107	56	9-900	11.361	71	6.157	7-172			
27	14-620	15-466	49	12-927	13-982	57	9.670	11.115	72	5-919	6.778			
28	14-650	15-385	43	12.760	13-851	58	9.450	10-857	. 1	-				

TABLE IX. Value of an Annuity of £1 (or Number of Years' Purchase of an Amulty) on the Joint Continuance of Two Lives not under 15, nor exceeding 75 Years of Age, according to the Carisie Table of Mortality, and reckoning Interest at the several Rates of 3, 4, 5, and 6 per cent. per Annum.

	P.S.	10 '		1.	Īa.	Ages	10	14	T	T
Bq	wal.	3 per 0001.	1	5 per cent.	6 percent	Diff. 5 Year		4 per cent		1 .
15	15	18-908	16-272	14-215	19-578	23 28 94 29	16747	14-670	13-000	11-637
16 17	16 17	18·719 18·549	16-134 16-007	14-119	12-499 12-428	25 30	16:524	14.339	12-967 12-742	11.532 11.433
18	18	18·542 18·365	15-889	13-925	12-358	26 31	16-097	14-176	12-615	11.333
19	19	18-182	15-748	13-827	12-284	27 32	15.875	14-006	12-482	11.552
20 91	20	17-993 17-797	15-610	13.724	12-206 12-123	29 34	15-648 15-424	13.830 13.657	12-344	11-116
91 92	23	I 17∙588 I	15·466 15·310	13.616 13.497	12-031	30 35	15-209	13.491	19-208 19-078	11-007 10-904
23	23	17:379 17:148	15-148	13.372	11-933	31 36	14-989	13-321	11-944	10-797
24	24 25	17.148	14-978	13-240	11-829	32 37 33 38	14-764	13.146	11.806	10 686
25 04	96	16-916 16-681	14-800 14-690	13-101 12-960	11.718	34 39	14-531	12.964 12.773	11:661 11:508	10-569
27	27 28	16-437	14-431	12-811	11-495	35 40	14.048	12.581	11.354	10·445 10·320
98	28	16-196	14-944	12-663	11-365	36 41	13-812	12-394	11-204	10-198
1 29	29 30	15-976	14-975	12-530	11-250	37 49 38 43	13-579 13-346	12-209	11-056	10-078
31	30 31	15·784 15·591	13-930 13-784	12-419 12-308	11-173 11-086	I 39 44	13-346	11.833	·10-907 10-753	9-957 9-831
32	32	15·591 15·392	13-632	12-191	10-995	40 45	12-868	11 641	10-598	9-705
33	33	15-180	13-469	12-064	10-894	41 46 49 47 43 48	12-630	11.450	10-444	9.579
34	36	14-954 14-790	13-294 13-111	11:996 11:780	10-783 10-686	43 48	12-389	11.053	10-287 10-121	9-450 9-314
36	36	14-477	12-919	11-697	10-541	44 49	11-968	10.830	9-937	9-161
37	34 36 36 37 38	14-231	12-724	11.470	10-413	45 50	11.590	10.291	9737	8-994
38	30	13·981 13·727	19-525	11.309	10-281	46 51 47 59	11-271 10-955	10°332 10°065	9-519	8-808
40	40	13.481	12·322 12·125	11·144 10 ·984	10-145 10-014	48 53	10-628	9787	9-292 9-054	8.614 8.410
24 25 25 27 28 29 31 32 33 34 35 37 38 37 38 37 38 37 38 38 37 38 38 38 37 38 38 38 38 38 38 38 38 38 38 38 38 38	41	13-254	11-945	10-839	9-896	49 74	10-294	9.492	8-799	8-189
48	49 43	13-036	11-772	10-701	9-785	50 55 51 56	9-924 9-550	9°181 8°855	8-528	7.952
43 44 45	44 1	12-822 12-600	11-602 11-426	10-566 10-425	9-677 9-563	51 56 52 57	9-179	8'524	8-242 7-950	7-699 7-440
45	45	12:371	11-243	10-278	9-444	63 68	8.797	8-194	7-657	7.170
48	46	12-128	11-047	10-119	9.314	54 59	8.439	7 876	7.375	7·179 6·996
47 48	47 48	11-870 11-591	10-837	9-947	9·179 9·013	55 60 56 61	8-098 7-788	7.574	7.106	6-695
49	49	11-279	10-607 10-345	9-756 9-535	8-836	57 62		71025	6-860 6-615	6.466 6.246
50	50	10-942	10-059	9-291	8-617	88 63	7.175	6-759	6.370	61024
51 52	51 59	10-579	9748	9-023	8:384	59 64 60 65	6.629	6.482	6-127	5.805
63	53	10.212 9.849	9-434 9-117	8-751 8-474	8·147 7 ·9 05	61 66	6.323	6-225 5-966	5-895 5-678	5·594 5·398
54	54	9-480	8.796	8-192	7-656	62 67	6.054	5743	5.458	5·198
55	55	9-103	8-465	7-900	7:397	63 69	5·779 5·490	5.493	5-230	4 990
53 54 56 57 58 59 60 61	54 55 56 57 58 59 60	8·7±1 8·334	8-128	7-600	7·130 6·853	64 69 65 70	5·190 5·193	5-229 4-956	4-988	4.767 4.534
58	58	7-984	7·783 7·444	7-293 6-988	6.577	A6 71	4-889	4-067	4.737	4·534 4·285
59	59	7-605	7-131	6.705	6.322	67 79	4.580	4:386	4-207	4-041
60 61	60 61	7-295 7-044	6-854	6.456	6.097	68 73 69 74	4-297	4-123	3.961	3-810
62	62	6.804	6-630 6-417	6-257 6-067	5-919 5-748	69 74 70 78	41135 31804	3·878 3·661	3·731 3·528	3·594 3·403
63	63	6.563	6.202	5-875	5.576	l	ا مسد		- 000	- 400
63 64 65 66 67 68 69 70 71 72 73	64 65	6:308 6:047	5.974	5-669	5.390	Diff. 10Year	ايد	1	1	1
66	66	6-047 5-774	5·738 5·490	5·456 5·230	5·197 4·991	15 25	17-794	15-460	13-608	19-115
67	67	5.486	5-228	4.990	4.770	16 26	17.578	15-298	13-483	12-017
68	68	5-188	4-954	4-737	4.537	17 27 18 28	17·363 17·149	15·136 14·975	13·359 13·235	11-919
70	69 70	4-877 4-556	4.666	4.471	4.289	19 29	16-943	14-821	13-117	11-739
71	71	4-217	4·367 4·050	4·191 3·893	4*028 3*748	20 30	16749	14-677	13-008	11-646
72	79 73	3.904	3.755	3-615	3.485	21 31 22 33	16·551 16·344	14·530 14·374	19-896	11-559 11-466
13 74	74	3*631 3*400	3.497	8-371	3-254	23 33	16-344	14-208	12-776 12-648	11.365
74 75	74 75	3-231	3-279 3-119	3·165 3·015	3-058 2-916	24 34	15-897	14-039	12-510	11-255
DE	E. 5			1 2010		25 35 26 36	15.660	13-848 13-658	12-365 12-214	11.130
15	90	18-493	15-922	13-950	12:385	96 36 97 37	15·417 15·168	13-469	12-058	11.018 10.891
16	21	18-230	15-781	13-853	12:304	378 38	14-918	13-265	11-900	10-763
17	22	18-036	15-639	18-746	12-222	20 39	14-675		11-747	10-639
18 19	93 94	17:838 17:633	15·493 15·341	13-636 13-590	19·137 19·047	30 40 31 41	14-449	12-897 12-728	11.607 11.474	10-596 10-490
50	95	17:421	15-182	13-398	11-959	32 42	14-017	19-560	11.349	10-315
20 21	26 27	17-204	15-019	13-272	11-853	33 43	13-798	12.389	11-907	10-207
22	27	16-977	14-846	13-137	11.746	34 44	13-669	12-208	11-063	10 -09 1

•	1	_					Ą	_				 i
ь	11. 10		3 per cent.	4 per eent.	5 per cent.	6 per cent.	DIF. 90	years,	3 per cent.	4 per ovat.	5 per orat	6 per cent.
•	35 36	45	18·331 13·082	12-019 11-819	10-912 10-750	9-968 9-836	15 16	35 36	16-995 16-063	14·347 14·169	12-765 12-626	11.462
	37	46 47	12.823	11-610	10.579	9-696	17	37	15.834	13-993	12-489	11-352 11-244
	90	48	12-550	11.388	10-396	9-545	is	38	15-603	13-815	12.350	11.133
1	39 40	49	12-257	11-146	10-195	9.376	19	39	15-367	13-632	12-206	11-018
1	40	50	11:954 11:645	10-894	9-984	9-197	90	40	15-131	13.449	12-062	10-903
1	41	51 52	11.338	10.635 10.378	9766 9548	9-019 8-827	21	41 42	14-903 14-673	13-272 13-094	11-923 11-783	10.793 10.681
•	43	53	11.031	10-120	9.329	8-639	23	43	14.442	12-914	11 641	10.568
1	44	54	10-720	9-856	9-104	8 445	94	44	14-202	12.726	11.499	10.449
1	45	55	10.400	9-583	8.870	8-243	25	45	13-954	18-530	11:335	10.323
1	46	56	10-071 9-733	9.301 9*009	8-626 8-372	7-808	26	46	13-696 13-425	12·325 12·107	11·170 10 ·993	10-189 10-044
-	47 48	57 58	9-392	8711	8.111	7.578	27 28	47	13.143	11-878	10.808	9-889
- 1	49	59	9-053	8-416	7-851	7.348	29	49	12-849	11:638	10.607	9-724
- 1	50	60	8729	8-132	7.601	7.127	30	50	12-551	11.393	10.404	9-554
- 1	51 52	61 62	8·429 8·135	7.869 7.611	7·870 7·148	6.923	31	51 52	12-237 11-919	11-132	9-962	9:370
- 1	53	63	7.839	7:350	6-911	6.515	39	53	11.594	10-593	9730	9-180 8-982
1	54	64	7.533	7-078	6.660	6.299	1 34	54	11-261	10-311	9.490	8775
- 1	55	65	7-219	6798	6.418	6.073	35	55	10-919	10-020	9.240	8-559
- 1	56	66	6·896	6.208	6.199	5.836	36	56	10.570	9-721	8-981	8-334
- 1	57 58	67 68	6-224	5.897	5-881 5-600	5-585 5-398	37 38	57 58	10°216 9°865	9-416	8-716 8-449	8·101 7·866
1	69	69	5.890	5-591	8.319	5-069	39	59	9-531	8-820	8-194	7-642
1	60	70 71	5-565	5-298	6'044	4-816	40	60	9-224	8.553	7-961	7.436
- 1	61	71	5-254 4-963	5-006	4.779	4.569	41	61	8-960	8·325 8·104	7763	7-263
- 1	62 63	72 73	4.699	4.737	4.302	4·337 4·125	42 43	63	8-705 8-450	7.884	7·871 7·379	7-096 6-928
- 1	64	74	4.459	4-269	4.094	3-931	1 44	64	8-183	7-651	7.178	6-749
1	65	74 75	4.257	4.082	3.881	3.770	45	65	7-910	7.411	6-964	6*749 6*562
þ	DH. 18	Years			,,,,,,		46	66	7-624	7 159	6.740	6.362
1	15		17-063 16-865	14-918	13-195	11.793	47	67	7·325 7·012	6-612	6·503 6·251	6·149 5·922
1	16 17	31	16-669	14-771 14-625	12-973	11-622	48 49	68	6.682	6.314	5-980	5-676
	is		16.466	14.473	12-857	11.532	1 50	70	6.338	6.001	5-695	5-415
	19	34	16.525	14.311	12.733	11.435	61	71	5-977	5-671	<i>5</i> -391	5.135
-1	20		16-031	14-142	12-602	11.339	52	70 71 72 73 74 75	6-636	5·357 5·071	5.102	4-967
- 1	21 22	36	15·802 15·565	13-966 13-782	12:464	11-223 11-107	53 54	73	5-326 5-048	4.815	4·837 4·600	4-622
- 1	23	38	15.322	13.593	12-169	10.986	1 55	75	4.813	4-598	4.400	4-217
1	24	39	15-073	13.398	12-013	10.860	Def. S	5 year		1	1	'
1	25	40	14-894	13-202	11.856	10.733	15	1 40	15.348	13-623	12-201	11-019
1	26 27	41	14.344	12-825	11.706	10.613	16 17		15·116 14·894	13·444 13·273	12.061 11.928	10-908 10-803
1	28	43	14-107	12.638	11.407	10-371	l is	43	14-673	13-103	11796	10-699
1	29	44	13.875	12-455	11-261	10-254	18	44	14-444	12-996	11-657	10-589
ı	30		13-650	12-278	11.121	10-142	20	45	14-207	12741	11.911	10.473
	31 39	46	13-416	12·093	10-974 10-817	10-024 9-896	21 22		13-969 13-696	12·545 12·336	11:355	10:348 10:219
ı	33	48	12-908	11 685	10.644	9-754	23		13.417	12-111	11.004	10-062
	34	49	19-620	11-449	10.449	9-592	24		13-114	11-864	10.801	9-893
	3.5	1 50	12-314	11·196 10·994	10-238	9-414	25	50	12-793	11-599	10-581	9708
1	36	51 52	11-989	10-649	10.0(19	9-219	26	51 52	19-454 19-110	11-317	10:344	9-507 9-299
1	320	1 53	11.330	10-369	9-776 9-538	8.815	27 28	53	11-765	10-738	10·100 9·853	9-087
	39	54	10-995	10-084	9-294	8-605	29	54	11.430	10.450	9-608	8.876
	40	55	10-658 10-325	9·796 9·510	9-046	8.389	30	55	11:089	10-164	9:364	8.066 8.449
	41		9-992	9-223	8·799 8·549	8·175 7·956	31 32	56 57	10.749 10.402	9·873 9·575	9·114 8·855	8.449
	43	58	9-665	8-940 8-669	8.302	7.739	33	58	10-055	9.275	8-594	7-994
	44	1 59	9-353	8 669	8-066	7.532	34	59	9-721 9-410	8-966	8:341	7-772
	4.0	60	9-063 8-903	8·417 8·193	7·846 7·652	7:339	34	60	9-410	8716	8-105	7·565 7·382
	46	61	8.545	7-970	7 458	7.170	36	61 62	9-132 8-859	8-476 8-239	7:897 7:691	7-202
	46	63	8-279	7739	7-256	6.824	37	63	8-584	8-000	7.481	7-018
	48	64	7-992	7.487	7-034	6.627	36	64	8-296	7748	7:260	6-822
	5(65	7-691	7-221	6.799	6.417	40	65	8-006	7.493	7.034	6-622
	51	66	7:374	6-939 6-646	6.282	6·190 5·059	41 42	66	7713	7·234 6·967	6.904 6.969	6-416
	53	3 68	6713	6:344	6.009	5704	43	68	7:106	6.692	6.319	5-980
	54	1 69	6.370	6-033	5-725	5.445	44	69	6.790	6.407	6.061	5-746
	64	70	6-019	5-712	5.431	6.174	4.5	70	6.465	6.113	5.793	5.502
	57	71	5-656 5-310	5·378 5·058	5·123 4·826	4.888 4.612	46	71	6·127 5·806	5:804 5:510	5·510 5·240	5-242 4-993
	56	7 72 8 73 9 74 0 75	4-995	4.765	4.553	4.358	47 48	71 72 73 74 75	5.513	5-241	4-992	4.763
	56	9 74	4.719	4.509	4.315	4-136	49	74	5-247	4.996	4-766	4-555
1	8	175	4.498	4:304	4-125	3-959	50	75	5.022	4.790	4.577	4.380

Ages	_				Y	. Α	Mr.	,			
Dir. 30 ye		3 per cent.	4 per cont.	5 per cont.	G per cent	Dit. 40	YOUTS.	3 per cent	4 per 0004.	5 per 000 t.	6 per
	15	14:381	12-884	11-630	10-570	15	55	11-528	10-543	9-692	8-953
16 4	16	14-129	12-685	11-478	10.443	16	56	11-166	10-234	9-427	8-724
	17	13.872	12.481	11:309	10.312	17	57	10.403	9-923	9-158	8.490
18 4	18	13-601	12-264	11.134	10-170	18	58	10-444	9-614	8-890	8-955
	19	13:307	12-025	10.939	10.009	19	59	10-101	9-318	8-633	8-030
	50)	12495	11.769	10-727	9-833	20	60	9782	9-043	8:394	7-892
	51	12-663	11-494	10-498	9-640	21	61	9-199	8-8110	8-184	7 639
	12	12:325	11-518	10-261	9-439	22	63	9-218	8-558	7-975	7-457
	33	11-961	10-924	10-017	9-231	23	63	8-933	8-311	7.760	7-269
	54	11-632	10-629	9-766	9-016	51	64	8-635	8-051	7.533	7-069
25 5	56	11-274	10-325	9-505	8790	25	65	8.329	7.783	7-295	6-859
96 5	56	10-911	10-015	9-237	8-558	26	66	84)12	7.503	7-047	6-638
	57	10-541	9-696	8-960	8:316	27	67	7-683	7-210	6.785	6-403
28 5	88	10.176	9:390	8-084	8-073	28	68	7:345	6-908	6.514	6-158
	59	9.836	9-085	8-497	7-847	29	69	7.004	6-600	6.236	5-9 05
30,6	30	9-529	8-820	8-196	7 G45	30	70	6-663	6-291	5-954	5-648
	31	9-259	8-587	7-995	7.470	31	71	6.30	5-969	5-660	5.378
	32	8-993	8.368	7.796	7:296	32	72	5-976	5-664	5.379	9-119
	53	8721	8-122	7:591	7.117	33	73	5 673	5.386	5.123	4:863
	34	8.434	7-872	7:372	6-924	84 35	74 75	5-403	5.137	4.894	4-671
35 6	35	8-140	7.614	7.143	6721			5-179	4-933	4706	4.498
36 6	36	7.834	7:343	6-903	6.507	Dif 4	60°				
37 6	37	7.517	7.081	6.611	6-380	15 16	61	9-852	9-103	8-446	7-867
	58	7.191	6.769	6.388	6.043	17	62	9-565	8 8 8 5 7	8-233	7.082
40.7	39 70	6.856	6:466	6.113	<i>57</i> 93	iá	63	9-287	8-617	8-026	7-502
	'n	6.515	6-157	5-832	5.536	19	64	9-006	8·375 8·120	7-816	7.318
	2	6.169	5-841	5-549	5-269	20	65	8712	7-856	7:593 7:361	7:193
	73	5*846 5*556	5.544	5.269	5-017	ΣΪ	66	8.411	7-581	7:118	6-918
	74	5·299	5-278 5-042	5*023	4*790 4*589	22	67	8-099	7-292	6-860	6702
	75	5-089	4.850	4*806	4-427	23	68	7.773	6-992	6-591	6-471
	_	2.000	2 000	4.030	4-42/	24	69	7:091	6-680	6.309	6.229 5.973
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15 5	50	13-131	11-882	10-822	9-913	96	71	6:369	6-024	5710	5.425
	ši	12-794	11-603	10-589	9717		72	64022	5-706	5.418	5-155
	39	12-459	11:325	10:356	9-520	28	73	5-709	5-418	5-153	4-910
	53	12-122	11143	10.119	8.318	29	74	5.434	5-186	4-920	4-695
	54	11.780	10755	9.875	8-109	30	75	5-213	4-964	4-735	4-624
	55	11.429	10.458	9-621	8-891	Dif. 5			1	1	
21 5	56	11-073	10-154	9.359	8-665	15	65	8.458	7-897	7:398	6-950
	57	10.706	9.840	9 087	8.428	16	66	8-142	7-618	7:151	6731
	58	10.342	9-526	8 814	8-189	17	67	7-817	7:331	6.894	6.501
	19	9-994	9-225	8-551	7-959	18	68	7.485	7:034	6-628	6-≥62
	9U	9-669	8-943	8:306	7744	19	69	7-141	6.725	6.350	6-010
	81	9-380	8-694	8-190	7.555	20	70	6.790	6.407	64161	5746
	9 22	94/94	8-447	7.875	7:367	21	. 71	6.427	64176	5758	5.469
	33	8.807	8-198	7-658	7.177	83	72	6483	5.762	5.469	5-2 02
	34	8.515	7.943	7.434	6 979	23	73	5771	5-475	5-206	4-959
	35	8-224	7.688	7-210	6.781	24	74	5.493	5.221	4-971	4743
	96	7-924	7.423	6.975	6.572	25	75	5-263	5-010	4-778	4-565
	97	7.612	7.146	6728	6.331	Dif. 53					
	38	7*288	6.857	6.468	6.116	15	70	6-818	6.433	6-084	5767
34 6	59	6.952	6.864	6-194	5468	16	71	6.152	6-098	5.778	5.486
35 7 36 7	(''	61608	6.545	5-910	5-6119	17	72	6.108	5-784	5-490	5-221
30 7	70 71 72	6.591	5-916	8-611	5.334	18	73	5799	5:500	5-228	4-990
37 7 38 7 39 7	72 73	8-914	51807	5.327	5-171	19	74	5-524	8-249	4-997	4.766
30 7	13	5.609	5 ·326	890.9	4.832		75	5-298	5-042	4.807	4-592
40 7	74 75	6:337	5-076	4.638	4 619	Dif. 6	yrara.		F-088	4-001	ايمميا
40 7	0	5.115	4.872	4-650	4.446	15	75	5.315	5.057	4-821	4-604

Principal Works on Annutites and Assurances.—Bally's Doctrine of Life Annutites and Assurances, 1813. Milne's Treatise on the Valuation of Annutites and Assurances, and Construction of Tables of Mortality, 1815. Corbust's Doctrine of Compound Interest, 1825. Article Annutrus in Encyclopedia Britannica. Jones's Treatise on Annutites and Reversionary Payments, published by the Society for the Diffusion of Useful Knowledge, a work chiefly distinguished for the numerous tables which it contains, including a series computed by Barrett's method. See also other works referred to in this article, and in that on INSURANCE on Lives.

INVOLUE: a recognition of goods and one of the containing a description of goods and one

other works referred to in this article, and in that on INSURANCE ON LIVES.

INVOICE, a mercantile document containing a description of goods sold or consigned, with an account of the charges, if any, that are made against the buyer or consignee. Inland invoices are generally made out in the form of bills of parcels, containing in the title the place, date, and names of the parties. Shipping or exportation invoices are usually headed with a short account of the goods, the names of the vessel and captain, the port of destination, the name of the consignee, and a specification of the account on which the goods are sent.

Pro forma invoices are statements of suppositious transactions, sometimes made out in order to show the ordinary allowances and charges on goods, and consequently, with the prices, to exhibit the estimated net proceeds.

IODINE, a substance obtained by a chemical process from kelp, from soap-makers' black ash, or from the brown residuary kelp-liquor of the soapboilers. It is soft and friable, of a blueish-black colour, and metallic lustre. Sp. gr. 4.946. It is extremely volatile. Its smell resembles that of diluted chlorine; its taste is sorid. Iodine was discovered in 1812 by M. Courtois of Paris, and its compounds

acrid. Iodine was discovered in 1812 by M. Courtois of Paris, and its compounds are as yet employed principally in medicine, where it is used in glandular diseases, and as an alterative. Mr Brande is of opinion, however, that from the rich colours of some of its metallic combinations, it might be employed in calico-printing.

IONIAN ISLANDS (UNITED STATES OF THE), a republic, under British protection, situate on the W. and S. coasts of Greece, consisting (besides islets) of seven principal islands; namely, Corfu, Cephalonia, Zante, Santa Maura, Ithaca, Cerigo, and Paxo. Area, 1041 sq. miles. Population in 1839, 221,057. The government is vested in a high commissioner residing at Corfu, who represents the sovereign of Great Britain,—a legislative assembly of 29 members elected by the synolets or nobles, and 11, styled integral, appointed by the commissioner,—and a senate composed of 5 members elected by the legislative assembly, and a president nominated by the commissioner. nominated by the commissioner.

nominated by the commissioner.

These islands are almost all of an irregular form; their coasts are rugged and indented; and barren rocks and heath-covered hills form nearly half their whole contents. The climate is mild, but subject to sudden changes; hurricanes and earthquakes are frequent, especially in Zante, and the sirocco occasionally makes the heat oppressive. The land is mostly in the hands of small proprietors, who let it out on the métager system to tenants paying half the produce as rent. Being more favourable to grape cultivation than to the raising of oorn, upwards of three-fourths of the surface available for tillage is laid out in currant grounds, vineyards, and olive-plantations, which are generally well managed. Cephalonic and Zante, however, are the only islands in which currants are grown, with the exception of Ithaca and Santa Maura, in which a few acres are employed for that purpose. Oil and wine are chiefly the produce of Corfu, but in all the islands is clived in the current of the consumption.

The quantity of bread-corn grown is equal to only one-fourth of the consumption. sumption.

consumption.

In Corfu and Zante, soap is made to some extent; at the latter also, silk, gros-de-naples, and handkerchiefs are woven. In other respects manufactures, properly so termed, can scarcely be said to exist. The wives of the peasants, however, spin and weave a coarse kind of woollen cloth, nearly sufficient for the use of their families; and some coarse blankets and lineas are also made. The imports into the Ionian Islands, on an average of the three years ending 1839, amounted to £637,439; about one-third of which consisted of wheat, brought mostly from Odess; the chief other articles were Indian corn, live-scock (from Albania and Greece), colonial produce, British manufactures, and dried fish. Of exports, the annual amount, on an average of the same three years, was £334,356; consisting mostly of currants (17,746,648 lbs., £229,299) sent almost wholly to Great Britain; with about 30,835 barrels (each of 16 gallons) of olive oil, and 1,763,779 lbs. soap; the other articles were seed very trifling value.

The amount of shipping possessed by the islanders is considerable; much of it is employed in the Levant trade. Of 265,823 tons entered inwards the ports of the different islands in 1839, no fewer than 127,356 tons were Ionian; the remainder was chiefly Greek, Austrian, British, and Russian.

Russian.

Cor/N., situated in the island of that name, in lat. 39° 30′ N., long. 19° 54′ E., is the principal port and seat of government. Pop. 16,000, of whom 4000 are Jews. The town is very strongly fortified. The harbour, which is one of the best in the Levant, and has a depth of about 30 feet, is formed by the Island of Vido, the rocks called Conditional, the Lazaretto island, and the New Fort.

The chief other ports are Zante, in the island of the same name, and Argostoli, in Cephalonia.

MEASURES, WEIGHTS, MONEY, DUTIES, &c.

Measures and Weights.—The Imperial system was introduced in 1828, when the stadio of 40 circulating medium is composed of Spanish, carnaco was made equal to 1 Imp. furlong; the harrel to 16 Imp. gallons, or 128 dicatoll or pints; the killo, corn measure, to 1 Imp. bushel; the libbra sottlie to 1 lb. troy; the libbra grossa to 1 lb. avoird; and the talanto to 100 lbs. avoird.

The chief old measures are the Zante cloth braccio = 25°.18 inches; and silk braccio = 25°.27 inches; the Zante barile = 1468 Imp. galls.; the Corfu barile = 15 Imp. galls.; the Corfu barile = 15 Imp. galls.; the Corfu barile = 15 Imp. galls.; the Corfu barile = 15 Imp. galls.; the Corfu barile = 15 Imp. galls.; the corfu barile = 15 Imp. sers. I rood, 24 perches; the moggio, land-measure, of 8 misure, or 24 tappade = 2 Imp. acres, I rood, 24 perches; the guintal of 44 okss = 133-15 lbs. avoird.; and 10 okss = 38 lbs. avoird.

Money.—Accounts are kept in taleri or dollars, each of 100 oboll; also in British money; and in

These islands, after many changes, became, in the 15th century, subject to the dominion of Venice. After the downfal of that republic, they were the cause of frequent contention among the Mediterranean powers, whose mutual jealousies led to their being formed, in 1815, into an independent state, under the protection of Great Britain, by whom they are garrisoned with a force of about 3000 men.

IPECACUANHA, a medicinal root derived from several plants growing in S. America. The best is the annulated, yielded by a small shrubby plant (Cephazins Ipecacuanha), found in moist situations in Brazil and New Granada. It occurs iis Ipecacuanha), found in moist situations in Brazil and New Granada. It occurs brown, red, and gray, or grayish-white. This kind, sometimes called Brazilian or Lisbon ipecacuan, is exported from Rio Janeiro in bales and barrels. The root is in short pieces, of the thickness of a goose-quill, with numerous circular depressions or clefts, and much twisted; and having a central woody fibre, surrounded by a cortical part, in which its virtues chiefly reside: the larger, therefore, its relative proportions the better.

Another kind, black and weaker, the product of the Psychotria emetica, a native of Peru, is sometimes exported from Carthagena.

The primary effect of ipecacuanha is that of stimulating the stomach. If the dose be sufficiently large it acts as an emetic, a purpose for which it is much employed. It was first imperfectly described by Piso in 1648; but it did not come intogeneral mass till about 1686, when Helyetins, under the patronage of Louis XIV., introduced

use till about 1686, when Helvetius, under the patronage of Louis XIV., introduced

it into practice.
IRIDIUM, a rare metal discovered in 1803 by Mr Tennant. It is heavy, brittle,

whitish, and when carefully polished, resembles platinum. One of its most remarkable characters is the difficulty with which it is acted upon by acids.

IRON (Dan. Iern. Du. Yser. Fr. Fer. Ger. Eisen. It. & Por. Ferro. Rus. Scheleso. Sp. Hierro. Sw. Iern) is at once the most diffused, the most abundant, and the most important of the metals. It has a peculiar gray colour, and strong metallic lustre, which is susceptible of being heightened by polishing. In ductility and malleability it is inferior to several metals, but exceeds them all in tenacity. At common temperatures it is very hard and unyielding; and it is one of the most infusible of the metals; but this disadvantage is counterbalanced for all practical purposes by its possessing the property of welding in high perfection. Fusing point, 3479° Fahr. Sp. gr. 778. When exposed to the atmosphere it absorbs oxygen, and becomes an oxide, or rusts. It is attracted by the magnet, and may uself be rendered permanently magnetic. Its uses are almost innumerable. "Iron," says Dr Ure, "accommodates itself to all our wants, our desires, and even our caprices; it is equally serviceable to the arts, the sciences, to agriculture, and war; the same ore furnishes the sword, the ploughshare, the spring of a watch or of a carriage, the chisel, the chain, the anchor, the compass, the cannon, and the bomb: it is a medicine of much virtue, and the only metal friendly to the human frame." And it was forcibly remarked by Locke, that he who first made known the use of iron "may be truly styled the Father of Arts and Author of Plenty."

This metal is found native in very small quantities; but its ores are numerous, and widely diffused. The principal are the following:—The red oxides of iron included under the name of red hæmatite; the brown hæmatite of mineralogists; the black oxide, or magnetic iron ore; and protocarbonate of iron, either pure or in the form of clay iron ore. The three former occur most abundantly in primary districts, and supply the finest kinds of iron,—as those of Sweden and India; while of the most infusible of the metals; but this disadvantage is counterbalanced for

districts, and supply the finest kinds of iron,—as those of Sweden and India; while clay ironstone, from which most of the British iron is extracted, occurs in secondary deposits, and chiefly in the coal formation; being found in layers in slaty clay

between the beds of coal.

Iron is divided into two distinct qualities; pig or east iron, the metal in its crudest state, and malleable or bar iron, the same when freed from impurities by an extension of the processes requisite for the production of the first kind.

An extension of the processes requisite for the production of the first kind.

Pre or Cast Ison.—The first process is that of roasting or calcining the ore in a kin, in order to drive off the water, sulphur, and arsenic, with which it is more or less combined in its native state, an operation by which it loses one-sixth part of its weight. The roasted ore is then subjected to the process of smelting, by which it is reduced into a metallic state by means of fusion. This operation is conducted in a blast-furnace, charged from the top with certain proportions of ironer, of coke or coal, and of limestone; the use of the last being to act as a flux to the ore, and promote its fusion. In order to produce the degree of heat necessary for the fusion of the ore, its intensences is promoted by the forcing in of a current of air, for which purpose the agency of steam is now commonly employed. The fluid metal is allowed to run out from time to time, and conducted into moulds formed in the sand of the smelting-house floor, for the various things made of domestic use,—or it is conveyed into channels for the pigs, the form in which cast-iron is sold as a raw material, and the produce of which from the ore averages about 60 per cent. The term "pig-iron" was given by the workmen: the metal is run off into a main channel which they call the sow, and the bars at right angles to it they liken to pigs sucking the tests of the sow.

The quality of pig-iron depends not only upon the nature of the ore, but also upon that of the final. The principal subdivision is into foundery-iron and forge-iron.

Foundery-iron is used in the state of pigs for casting; it is of three qualities, distinguished by the numbers 1, 2, and 3:—

No. 1 contains a large proportion of carbon which it has acquired from the coke used for smelting; it is soft and very fluid when melted, so that it will mould into the most delicate forms.

No. 2 contains a smaller proportion of carbon than No. 1; it is also harder, closer grained, and of more regular fracture, more refractory in the furnace, and does not run so freely when melted; but being harder and stronger, it is preferred for purposes where strength and durability are required in preference to delicacy of form.

No. 3, sometimes called dark-gray iron, the only one of the three kinds fit for conversion into bar-iron, varies in the same direction as No. 2 from the qualities of No. 1, but in a greater degree; it is used for heavy work, where it has to bear great strains, and is exposed to constant wear.

Forpe-free is also divided into three qualities,—bright, motiled, and white, appellations which are indicative of their appearance. They all contain carbon, in proportions less than foundery-iron, and diminishing in the order in which they are here mentioned. Bright iron is used extensively for large castings; but the others are applicable only to the manufacture of bar-iron; being from their nature too thick when melted to run into the abape of the mould, and when cold too weak and brittle to be serviceable as cast-iron, even if the other objection did not exist.

Bar, or Mallerelle lower in order to convert pig into bar iron, it is first refined, an operation chiefly conducted in the "puddling furnace," by exposure to a strong heat, while a current of air plays upon its surface. By this means any undecomposed ore is reduced, earthy impurities rise to the surface as slag, and carbonaccous matter is burned; and the more complete the separation from these, the better is the fron. As the purity of the metal increases, its fusibility diminishes, until at length, though the temperature continue the same, the iron becomes solid. It is then, while still bot, beaten under the "forge hammer," or (as generally in th

Iron is believed to have been made in Britain on a small scale in the time of the Romans; but we have little authentic information respecting the progress of the trade until we arrive at a comparatively recent period. Down to the 17th century the ore was entirely smelted with charcoal; and there was a considerable number of furnaces in those districts where wood and iron ores were plentiful,—particularly the Weald of Kent, Surrey, and Sussex; but in course of time, wood-fuel becoming scarce, the trade was threatened with decay. Many attempts were made, during the 17th and early part of the 18th century, to retard the decline by the use of pit-coal, but without effect; the simple hand-worked bellows, or the more powerful water-movement, which produced a sufficiency of blast for charcoal, having little effect upon coal; and the number of furnaces, which in 1619 was estimated by Lord Dudley (who in that year obtained a patent for smelting with coal) at 300, fell off towards the middle of the 18th century to 59. Science, however, came to the rescue of one of our greatest staple manufactures. In 1760, Smeaton erected Iron is believed to have been made in Britain on a small scale in the time of the rescue of one of our greatest staple manufactures. In 1760, Smeaton erected a cylinder blasting-machine for the Carron Company, which, after some improvements, enabled the same furnace that formerly yielded only 10 or 12 tons weekly, to produce 40. Shortly after this, Watt's improvement of the steam-engine, and its application to iron-works, not only revived the trade, but enabled it to distance all foreign competition. Ones that formerly could not be worked with party sixther. all foreign competition. Ores that formerly could not be worked with profit, either all foreign competition. Ores that formerly could not be worked when pront, enture from their inherent intractableness, or from the small proportion of iron which they contained, were now advantageously submitted to the furnace, and more metal was extracted from the richest ores. Various improvements also took place in the manufacture of bar-iron, particularly by the substitution of hammering machinery for hand-labour, by Mr Cort's invention of "puddling" (patented 1783)—the great distinction of coal-made iron, and also by that gentleman's patent (1784) for the rolling of iron,—while at the same time the extent of the iron-works were greatly coal-ward and improvements made in the form of the furnaces. Of recent invenenlarged, and improvements made in the form of the furnaces. Of recent inventions, by far the most important is the substitution of the hot for the cold blast, by artificially heating the currents of air impelled into the furnace. This discovery of Mr Neilson of the Clyde Iron-Works, operates by obtaining a larger quantity of metal with a less degree of fuel. In 1829, with cold air, I ton of iron consumed 8 tons I cwt. of coal; in 1833, with hot air, the same quantity of iron was procured with only 2 tons 5 cwt. The nature both of the coal and the ore, however, is said to have much to do with this discovery, as in the south the gain in the consumption of fuel has not been so great; and a prejudice exists among the English iron-masters against the quality of the hot-blast metal.

The result of these inventions and improvements presents some of the most extraordinary facts in the history of manufactures, excepting perhaps the cotton-trade. In 1740, the quantity of iron made in England and Wales had sunk to 17,350 tons; in 1788, after the cylinder invention, the total annual produce was

68,300 tons. By 1796 it was 108,793 tons, or, including Scotland, 124,879; the iron trade in that country having more than doubled in eight years. In 1802, the annual produce of Great Britain was estimated at 170,000 tons; in 1823, it had grown to 442,066 tons; and in 1823, to 702,584 tons (Porter's Progress of the Nation, sec. 2, 442,066 tons; and in 1828, to 702,584 tons (Porter's Progress of the Nation, sec. 2, ch. 6). But, owing to the recently extended applications of iron to railways, machinery, gas-apparatus, roofs, columns, windows, and furniture, this rapid advance was nothing to its progress in the next decade. "In 1835," says Sir John J. Guest, an experienced ironmaster, "it was estimated at about a million of tons; in 1836, it was estimated at 1,200,000 tons; and the estimate made by a very intelligent person who went round the works in 1839 was 1,512,000 tons, which is rather increasing" (Report on Import Duties, 1840. Evidence, Q. 392). This increase was proportionally greatest in Scotland, where such was the expansion of the irontrade, that the produce, though only 37,700 tons in 1828, was, according to a report laid before the Glasgow Chamber of Commerce, augmented in 1840 to 250,000 tons, a quantity greater by 47 per cent. than the total produce of all Britain in 1802. The price of iron has been subject to very great fluctuations,—especially of late years. In September 1824, the current price of common bars at the shipping port was £9 a-ton; in March 1825, a period of great speculation, it rose to £14; but by March 1830, owing to the extended production consequent on this high rate, it fell to £5, 5s, a-ton. Since that period, in consequence of the increased demand for railways and other purposes, the price has risen considerably, and at present (February 1842) it is quoted, in bars, at £6, 15s, a-ton; that of pig being £4. Taking the quantity stated above, 1,500,000 tons, as the present annual produce, and applying this last price of £4, gives the value in pig at £6,000,000; to which, adding £3,000,000 as the cost of converting seven-tenths thereof (the common estimate) into bars, bolts, rods, sheets, and the other forms of wrought iron, makes the total annual value of the manufacture £9,000,000.

The great seats of the trade are,—in Staffordshire, near Birmingham, around Walsall, Bilston, and Dudley;—in S. Wales, aroun ch. 6). But, owing to the recently extended applications of iron to railways, ma-

portance.

ortance.

The exportation of British iron has increased in a degree corresponding to its production, notwithstanding the high duties with which it is loaded in almost all foreign countries. In 1820, the quantity of wrought and nuwrought iron and steel shipped was 85,066 tons, of the declared value of £1,131,788; in 1839, 247,912 tons, and value £2,526,79,50. The exportations in 1839 consisted of 124,138 tons bariron, about one-half of which was sent to the United States, and the remainder chiefly to Italy, Holland, India, and the colonies; 12,315 tons in bolts and rods, sent to Portugal, Italy, Germany, and India; 43,460 tons pig-iron, shipped mostly to the United States, France, and Holland; 10,337 tons east-iron, chiefly to the United States and British colonies; 777 tons wire to Belgium, Germany, United States, &c.; 3108 tons of anchors and grapnels, 11,225 tons hoops, 7195 tons nails, and 30,334 tons of all other sorts of wrought-iron (except ordnance), chiefly sent to the colonies, India, United States, Holland, Germany, and S. of Europe; 549 tons old iron; and 3974 tons unwrought steel, mostly to the United States.

The superiority of Great Britain above all the other countries of the world, in the production of iron, does not extend beyond quantity and cheapness; in point of quality the British iron is greatly inferior te that of Sweden, Norway, Russia, India, and other countries, which, besides possessing a superior ore, have the means of converting it into metal by the aid of charcoal, an agent preferred to coal, at least in the preparation of bar-iron. Hence a preference is given to foreign iron in the manufacture of culture and short 2000.

in the preparation of bar-iron. Hence a preference is given to foreign iron in the manufacture of cutlery; and about 20,000 tons are annually imported for that purpose, mostly at Hull, for transmission to Sheffield. It is principally brought

^{*} In Mr Scrivenor's History of the Iron Trade, the number of furnaces in blast, and estimated annual make of iron in the different districts in 1839, was stated as follows:—South Wales and Forest of Dean, 125 furnaces, 533,480 tons; South Staffordahire, 108 furnaces, 338,730 tons; North Staffordahire, 10 furnaces, 23,600 tons; Shropshire, 24 furnaces, 86,660 tons; Yorkshire, 31 furnaces, 89,960 tons; Derbyshire, 13 furnaces, 37,440 tons; North Wales, 12 furnaces, 28,680 tons; Newcastle-on-Tyne, 5 furnaces, 11,440 tons; Scotland, 50 furnaces, 195,100 tons. Total, 378 furnaces, 1,347,790 tons.

from Sweden, where the bar-iron is prepared by hammering instead of rolling; the finest being that made from the magnetical ore of the celebrated mines of Dannemora, near Upsala; and Taberg, near Lake Wetter. Except for the purposes of steel, Great Britain has not been an importing country of iron since 1790.

of steel, Great Britain has not been an importing country of iron since 1750. The present annual produce in foreign countries, in so far as it is known or has been estimated, may be stated as follows:—France possesses 475 furnaces, which produce 347,700 tons of cast-metal (fonte), worth £2,520,000; and 1500 refining furnaces, which produce 224,100 tons of malleable iron (gros fer), worth £3,720,000 (Report of Minister of Commerce, 1841): Sweden, 100,000 tons: United States (in 1837), 250,000 tons: Belgium (in 1837), 135,000 tons, from 89 furnaces: Saxony, 99,427 quintals, from 19 furnaces: Styria, 20,000 tons: Spain, 8000 tons.—(Scrivenor's History of the Iron Trade.)

IRON MANUFACTURES, on HARDWARE AND CUTLERY. These branches of industry have been in part described in the preceding pages. The larger and coarser articles are mostly cast at the founderies in S. Wales and other districts; but the smaller and finer articles are principally made at Birmingham and Sheffield, the two greatest seats in the world of the manufactures from iron and steel.

and steel.

Birmingham lies in the N. W. corner of Warwickshire, at a moderate distance from the Staffordshire mines,—a proximity which has rendered it, to a certain extent, the seat of iron manufactures from a remote time. These, however, were comparatively trifling until after 1790, when the discovery of the improved methods of smelting with coal, and the construction of canals from the town towards the comparatively trifling until after 1790, when the discovery of the improved methods of smelting with coal, and the construction of canals from the town towards the principal points of commercial distribution, caused such a rapid advance of prosperity that the population which in 1789 was only 53,735, grew in 1801 to 73,670; in 1821 to 106,722, and in 1841 to 190,467. The manufacture now comprehends the making of firearms, swords, bayonets, steam-engines, anvils, kitchen-furniture, nails, tools, locks, hinges, buttons, harness, tea-urns, chains, wire, and in short almost every kind of iron work, down to needles, pins, and the minutest article of a lady's toilet. Of late years, the manufacture of cast-iron goods has been rapidly improving and extending. Formerly the principal castings were heavy kitchen-furniture; but increased care in the selection of the metal, and a desire to produce elegant forms at a cheap rate, has led to cast-iron articles being fabricated of small size, and of light and tasteful patterns, which, when coloured by bronzing, almost equal the more expensive brass wares; and in hollow vessels, such perfection in thinness and lightness is attained, that the use of beaten copper is almost forgotten (Pen. Cyclop., art. BIRMINGHAM). Besides iron and steel goods, the town is distinguished for the manufacture of brass, plated and japanned wares, toys and trinkets. Of the latter the production is so immense, that Birmingham was called by Mr Burke the "toy-shop of Europe." The production of so many and minute articles has necessarily led to an almost inconceivable subdivision of employments; while the amount of business, of which some of these trifling articles form the subject, is truly wonderful. In 1824, Mr Osler, a manufacturer, stated to a committee of the House of Commons that he had received a single order for £500 worth of dolls' eyes! The manufacture of iron-wares, however, forms the great staple of Birmingham, as well as the district of which it is the metropolis, including the tract to the Wednesbury, and Stourbridge.
Sheffield, in the W. Riding of Yorkshire, has been distinguished from a remote

Shemeid, in the W. Riding of Yorkshire, has been distinguished from a remote period for her cutlery; though, as in the case of Birmingham, it is only since 1790 that the manufacture has risen into importance. The population of the town and parish, which in 1801 was 45,776, grew in 1821 to 65,179, and in 1841 to 110,891. Its staples are knives of every variety, razors, surgical instruments, files, scissors, soythes, saws, and all sorts of edge-tools; their quality being such as to lead to their being deservedly held in the highest estimation throughout the world. The conversion of iron into steel is also carried on to a greater extent in this town than in any other part of the kingdom. The manufactures of Sheffleld likewise embrace

grates and fireirons; also white-metal, and silver-plated articles.

The chief other localities are, Manchester and Glasgow, for machinery; fine tools are made at Warrington and Prescott, in Lancashire; needles and fish-hooks at Redditch, in Worcestershire; curriers' knives at Cirencester, in Gloucestershire;

^{*} The produce of the Dannemora mine (about 4000 tons annually) is almost wholly sent to Mesars Sykes of Hull, where it is called "Oregrund iron," a name derived from the port of shipment. The first marks are hoop L, which sells at £40 a-ton; and OO, and CL, £30. The best Russian mark, CCND seldom brings more than £20 a-ton.

fine fowling-pieces and pistols in the metropolis, where also the cutlery business is carried on extensively, though most of the articles bearing the name of a London vender are really made at Sheffield.

venuer are reasy made at Snemeid.

There are not many large capitalists in the hardware or cutlery manufactures. At Birmingham, most of the factories or workshops are on a comparatively small scale; and a large portion of the articles are made by artizans who work in their own houses. In Sheffield, this is even still more the case; a cutler being not unfrequently a journeyman one year and a master another, and conversely. In both places, the articles are generally purchased from the manufacturers by wholesale ironmongers, who dispose of them to retailers for home consumption, and to merchants for the export trade.

The extension of these branches of industry has been accompanied, or more properly has been occasioned, by improvements in the methods of production, which have lowered the prices of goods in a manner calculated to insure a continuance of prosperity to the manufactures by extending the number of consumers. This was more particularly the case between 1812 and 1832. Mr Babbage (Economy of Manufactures, § 146) has shown that during these 20 years, in a pretty extensive list of articles, the reduction in price on some—as anvils, candlesticks, and bed-screws, was from 40 to 45 per cent.; on others, as fireirons, and such like, it was 55 per cent.; on some kinds of looks, 30 per cent.; while, in a separate table, the reduction on several articles is shown to have considerably exceeded 100 per cent. None of the goods having ever been subject to duty, no means exist whereby to judge accurately of the extent of the iron-manufactures; but looking to what has been stated in the preceding article, the annual value of all sorts of iron, and hardware and cutlery articles produced in Great Britain, may be safely estimated at from £20,000,000.

The reduction in the cost of these commodities has occasioned a great increase.

The reduction in the cost of these commodities has occasioned a great increase in the number of foreign customers. The quantity and declared value of hardware and cutlery exported (exclusive of pig and wrought iron), was in 1820, 6697 tons, £949,085; in 1830, 13,269 tons, £1,410,936; in 1835, 20,197 tons, £1,833,043; in 1836, 21,072 tons, £2,271,313; in 1837, 13,371 tons, £1,460,807; in 1838, 15,295 tons, £1,498,327; in 1839, 21,176 tons, £1,628,521; and in 1840, 14,995 tons, £1,349,137: in 1841 the value was £1,625,191. About one-half is sent to the United States; the remainder to the colonies, India, Germany, and indeed most countries with which we have commercial relations. Of late, the exports have been somewhat checked by foreign competition, chiefly that of Belgium and Germany. IRONWOOD, the product of an evergreen tree (Sideroxylon), remarkable for the hardness and weight of its timber, which sinks in water. There are several species found in the W. Indies, Africa, America, E. Indies, and Australia. The smooth ironwood tree (S. inerma) is a native of the Cape of Good Hope.

ISINGLASS (Fr. Colle de poisson. Ger. Hausenblass. It. Cola di pesce. Rus. The reduction in the cost of these commodities has occasioned a great increase

ISINGLASS (Fr. Colle de poisson. Ger. Hausenblass. It. Cola di pesos. Rus. Karluk), a gelatinous substance chiefly formed of the dried sounds of fish; the best is made in Russia, and is obtained from the sturgeon. It should have neither taste nor smell, and be entirely soluble in warm water, but this is seldom the case,

taste nor smell, and be entirely soluble in warm water, but this is seldom the case, in consequence of the presence of some albuminous parts. It is employed in making medicinal jelly, blancmanges, court-plaster, and as a clarifier; when concentrated and dried, it forms a choice kind of glue. It is employed in making medicinal, it forms a choice kind of glue. It is extensively used for knife-handles, mathematical and musical instruments, plates for miniatures, billiard-balls, and toys. The finest ivory is produced from the tusks of the male Asiatic elephant (Elephas Indicus) termed Dauntelah; and specimens weighing 150 lbs. are sometimes exported from Pegu and Cochinchina. In trade, however, they are seldom met with above 70 lbs. in weight and do not weigh beyond 50 lbs. in Tiperah, which produces thousands of elephants, and from whence, as well as the adjoining province of Chittagong, the animals for the service of the East India Company are generally taken. The importations into this country of tusks are chiefly from Ceylon and the west coast of Africa; the total annual amount is about 5000 cwts., of which fully four fifths are entered for home consumption. In London they are classed into six sorts:—1st, Those weighing 70 lbs and upwards; 2d, from 56 to 70 lbs.; 3d, from 38 to 55 lbs.; 4th, from 28 to 37 lbs.; 5th, from 22 to 27 lbs.; 6th, scrivelloes, consisting of the smallest teeth and fragments. In February 1842, the price of these varied according to size and quality from £10 to £30 per cwt. They should be chosen large, straight, solid, and white; free from flaws or decay, and not very hollow in the stump.

The tusks or teeth of the seahorse and hippopotamus are also used as ivory. The latter, procured in Africa, are harder and whiter than those of the elephant, and do not turn yellow so soon. Fossil ivory from the tusks of the mammoth or elephant is that principally used by the Russian turners; it is found plentifully and in a high state of preservation in the Laichovian isles, and on the shores of the

Frozen Sea. S
IVORY-BLACK, a kind of animal charcoal, procured by the incineration or close distillation of ivory or the horns and bones of animals. It is used extensively

in the arts.

J.

J.

JACKWOOD, the timber of a species of Brand-Fruit-Tree.

JADE (CHINESE), a mineral referred by Jameson to the species prehnite, which is greatly valued in China, where it is termed yu. The finest is found in Yunnan; but the greater number are brought from Ele and other districts in Tartary. Its colour is greenish white passing into grayish green, and dark grass-green; it is semi-transparent and cloudy; fracture splintery; and splinters white. Sp. gr. 28 to 34. It is peculiarly difficult to cut; yet the Chinese take pride in fashioning it into various shapes, such as cups, saucers, bracelet clasps, buckles, and even animals; and it holds the chief place "in that world of precious trifles which the Chinese and Tartar ladies twine in their hair." Some of these articles require the labour of nine or ten years; but nothing can exhaust the patience of the yu-teiang, or workers in yu. The gem presented by the emperor to Lord Macartney was of this stone, worked in the form of a sceptre.—(Abel's Journey, p. 132-134, &c.)

JALAP (Fr. Jalap. Ger. Jalapp. Sp. Jalapa), the root of (Convolvulus jalapa) a plant indigenous to Mexico. This root often weighs 50 lbs. but is divided into portions, and in commerce occurs in dried pear-shaped masses, which when

jalapa) a plant indigenous to Mexico. This root often weighs 50 lbs., but is divided into portions, and in commerce occurs in dried pear-shaped masses, which when good are hard, resinous, with a brown shining fracture, and a nauseous smell and taste. It is often adulterated with portions of the root of white bryony, but these may be distinguished by their lighter colour and less compact texture. Dried pears are also sometimes substituted for it. The excellence of jalap depends on the quantity of resin it contains, as this is the part which composes the well-known drastic purgative. The annual consumption in this country is about 50,000 lbs. It is chiefly imported from Vera Cruz.

JAMAICA. [WEST INDES.]

JAPAN an empire in the eastern extremity of Asia, consisting of a very large.

JAMAICA. [WEST INDIES.]
JAPAN, an empire in the eastern extremity of Asia, consisting of a very large island, Niphon, about 800 miles long and 80 broad; three smaller islands, Kiusiu, Sikokf, and Jesso; and numerous islets. Area, 260,000 square miles. Population estimated at 25,000,000. Government, a pure despotism, but with this peculiarity, that two sovereigns are acknowledged,—the Dairi, a spiritual sovereign, whose capital is Miaco, in Niphon, pop. 500,000; and the Cabo, a temporal monarch, whose capital is Jeddo, also in Niphon, pop. 1,200,000. The Cubo, although he pays formal homage to the Dairi, is in possession of all the real power. S

whose capital is settle, also in Niphon, pop. 1,200,000. The Cubo, although he pays formal homage to the Dairi, is in possession of all the real power. S

The islands are intersected by chains of mountains, several of which are volcanic, and some so lofty as to be covered with perpetual mow. Many of the valleys are fertile, though the soil is not generally so; but the ingenuity and industry of the inhabitants have rendered even the most barren spots productive. Rice forms the principal object of culture; wheat, barley, and other grains are raised in smaller quantities. The chief natural riches are those which belong to the mineral kingdom. The precious meanly the entire basis of the foreign commerce of the country; sulphur is abundant; and there are also ambergris, naphtha, pearls, with agates and other precious stones; iron is rare. The Japanese, in point of civiliation, are scarcely inferior to the Chinese; and they have made nearly equal progress in manufactures. The articles in which they infinitiable varnish employed in their lackered ware, porcelain, and silk, linen, and cotton cloths. The infinitiable varnish employed in their lackered ware is obtained from the rest of the world; and the people are wholly unacquainted with shipbuilding and navigation; having no vessels except fashing-boats. Considerable intercourse took place with the Portuguese in the sixteenth century; but, owing chiefly to religious animosity, the settlers were massacred; and since 1638 all foreigners have been jealously excluded, except the Chinese and Dutch. The chinese trade employs about 10 junks, principally from Ning-po and Amoy, which make two voyages yearly; exchanging ugar, English woollens, and other commodities, for bar-copper, lackered ware, and dried fish. The Dutch trade is restricted to vivo vessels annually to Nangasaki, in lat. 33° 45′ N., long. 199° 5′ E., the chief city and port of Kusiu; pp. 70,000. In this place they have a factory; but the residents are restricted to eleven only; and the ships are carefully watch

same year amounted to fi. 680,800 (£55,733); comprising 7085 pecule bar-copper, valued at fi. 513,675; 1190 bales camphor, fi. 113,050; with small quantities of linen and slik stuffs, japan wares, gause and crape. These amounts are subject to little variation from one year to another; and the trade exhibits no symptoms of increase.

The principal measure of length is the inc = 6½ English feet. The measures of capacity here not been determined. The weights are similar to those of China. Money accounts are kept in tacks, mace, and candarcens, as in China. The tacl = 3½ Dutch florins = 6s. sterling. Most payments are made in silver ingots of various sizes, the values of which are determined by their weight. The Spanish dollar is valued at from 70 to 74 candarcens.

JAPANNED OR LACKERED WARES. Those of British manufacture were originally only coarse imitations of the lackered toys of Japan and China; but the originally only coarse initiations of the lackered toys of Japan and China; but the improvements of John Taylor and of Baskerville, who introduced the light and durable papier maché, have now given great elegance and extension to this branch of industry. The chief articles are trays, waiters, snuff-boxes, and similar things. Birmingham is the principal seat of the manufacture; but it is also prosecuted on large goals at Biliston and Walvarkanton. a large scale at Bilston and Wolverhampton.

Upwards of £3000 worth of foreign lackered ware are annually imported, chiefly

Upwards of £3000 worth of foreign lackered ware are annually imported, chiefly from China. That of Japan is the most highly prized; but it is brought only occasionally, and in very small parcels, from Batavia or Holland.

JASPER, a name given to those varieties of quartz in which the colours are red, brown, and black, and occasionally yellow or green, and which occur massive and disseminated with a fracture ranging from conchoidal to earthy, and lustre from glistening to dull. Jaspers are found in Scotland, Cornwall, and other places. Striped or Ribbon Jasper presents various shades of green, yellow, and red, —the finest being composed of equal and parallel layers of these colours. Chief localities, the Ural Mountains, Saxony, and Devonshire. Egyptian Jasper is generally of a brown colour without; but internally of a lighter hue, sometimes approaching to that of cream, surrounded with zones of brown, and sometimes

generally of a brown colour without; but internally of a lighter hue, sometimes approaching to that of cream, surrounded with zones of brown, and sometimes mixed with black spots.—(Jameson. Phillips.)

JAVA, a noble island subject to Holland, situate in the E. Indian Archipelago, between lat. 6° and 9° S., and long. 105° and 115° E. Area, including the adjoining island of Madura, 45,724 sq. miles. Population 5,000,000. Java and Madura are divided into 20 provinces, or residences. Capital, Batavia, the seat of government of the Dutch E. Indies. The Dutch have had settlements on this island since 1619; but it is only of late years that it has been wholly subdued. It was taken by the British in 1811, and restored in 1816.

but it is only of late years that it has been wholly subdued. It was taken by the British in 1811, and restored in 1816. S

Java is divided nearly in its whole length by a range of mountains of volcanic origin, running almost E. and W., and varying in their elevation from 5000 to 19,000 feet. The W. part is that chiefly subjected to European influence, and is in general more level and capable of cultivation than the E. part, which is mountainous and wooded, though diversified with rich valleys. This part is cultivated upon the native system, and is occupied by princes tributary to Holland. The lisand is well watered, and, upon the whole, is the most fertile and most improved of all the Eastern Islands, though it does not excel in the finer spices. The mineral products are triffing saltperre is found; and salt is manufactured on the coast near Batavia. The most important actural production is teak, which would be largely exported were the trade not subjected to a rigid monopoly. The chief objects of cultivation are rice, coffee, and sugar, the produce of which has been very greatly increased of late years. Tobacco and a variety of other tropical articles are also produced; and immense sums have recently been expended by the government in attempts to grow indigo, tea, and allk; though, as re-pects the last two, with but little success. Editle birds: nests are obtained in great quantity from the rocks, called Karang Bolang, on the south coast. Arrack and sugar are manufactured extensively by the Chinese at Batavia. In other respects, manufacturing industry is nearly confined to the coarse fabrics woven by the poorer natives.

Few places in the world can exhibit such an expansion of trade as has taken place of late years in Java. This has arisen mainly from its great fertility, the low price at which labour can be procured, and the pains which the government have taken to turn these advantages to the best account by the formation of roads, and by encouraging the investment of European capital in the culture of the

China, fl. 9,083,889; Britain, fl. 1,933,508; America, fl. 257,523; France, fl. 832,737; and Australia, fl. 725,104. The Dutch trade is chiefly in the hands of the "Mastschappi," a commercial association formed in 1825, whose capital now amounts to fl. 97,000,000 (about £8,000,000), of which fl. 20,000,000 stand in the name of the abdicated king.

The principal ports, and those to which foreign trade is confined, are Batavia, Samnrang, and Sourabaya, on the N. coast, where the sea being usually smooth, and the weather moderate, good anchorage may be found nearly at all seasons. The S. coast, owing to its complete exposure to the Indian Ocean, has no good harbours, and is but little frequented. The best in this quarter are Chelachap and Pachitan. Produce, especially rice, is shipped from most of these ports; but almost the whole external commerce of the island is concentrated at Batavia. About 105,000 lasts of shipping enter the ports of Java and Madura annually, embracing 80,000 Dutch, 10,000 British, and 13,000 lasts belonging to other countries.

Bulavia, the chief port of Java, and indeed of the whole Eastern Islands, is advantageously situated at the mount of the Jacatra, on the N.W. coast, in lat. 6° 10° B., long. 107° E., at the bottom of an extensive bay. A circular range of islands shelters the roads, and ensures afe anchorage; but the water is aballow, and large vessels lie about three miles from shore. The climate is sultry, and varies little throughout the year. Fahrenheit ranges from 72 to 86; the rainy season is generally from October to March, when westerly winds prevall; the dry from June to October, the period of the E. monsoon. The old town was proverbially unhealthy, and though of late years rendered more salubrious by the improvement of the canals, and the demolition of everal streets, is inhabited only by natives and Chinese; Europeans, though they still transact their business there, have their residences at Weltevreeden, a new town, several miles inland, where are likewise the government e

MEASURES, WEIGHTS, MONEY, &c.

MEASURES, WEIGHTS, MOWEY, &c.

Measures and Weights.—The ell = 272, and the foot = 12-35 Imp. inches.

The kanne, liquid measure, = 91 Imp. cubic inches; and 33 kannes = 13 English galls. old measure, or 104 Imp. galls.; a leaguer of arrack of 396 rands = 160 English wine galls., or 1331 Imp. galls.; a leaguer of wine is 360 rands.

The ordinary weights here, as well as throughout all the Eastern possessions of the Dutch, are requisiting the intercourse between the subjects those of China; the pecul, however, instead of 1332 ibs. avoird., is reckoned at 125 Dutch woy lbs. = 135 lbs. 10 os. avoird., but commonly estimated at 135 lbs avoird. Grain is sold in large quantities by the coyang of 3500 Dutch troy lbs. = 3581 lbs. avoird.; in small quantities by the toxyang of 500 Dutch troy lbs. = 3581 lbs. avoird.; in small quantities by the timbang of 5 peculs, or 10 seads. The kulsck = 74 catties; and the last contains 46 measures, each of 5 gantons.

JEAN, a thick, strong, twilled cotton fabric, used for staye is about taxands.

JEAN, a thick, strong, twilled cotton fabric, used for stays, jackets, trousers, and similar articles.

JERQUING, the search of a ship performed by a custom-house officer (called

JERSEY, GUERNSEY, ALDERNEY, and SARK, small islands in the English Channel, of the coast of Normandy, subject to the British crown; having been originally part of the patrimony of the Norman kings. Area of the whole, 112 sq. miles. Population, in 1841, 76,094. These islands have local legislatures, with governors appointed by the crown; their political constitution being separate from that of the United Kingdom.

that of the United Kingdom.

Jersey, the principal island, situate 13 miles W. of the coast of France, is 19 miles in length, and about 7 in breadth. The surface is undulating and fertile, and chiefly laid out in pasturage and orchards; apples, dider, butter, and cows, forming, with oysters and potatoes, the principal exports to England, in exchange for coals and manufactures. The trade in other respects is considerable. Nearly 80 vessels (8000 tons) are employed in the deep-sea cod-fishery, the produce of which is mostly sent to Brazil; and the Jersey merchants, besides carrying on an active intercourse with France, import largely wine and brandy from Spain, Portugal, and Sielly, and sugar and coffee from Brazil, which they exchange in the N. of Europe for corn, timber, hemp, and tailow. Shoes are extensively made from French leather, and about 13,000 pairs annually sent to British America. Shipbuilding is carried on to a great extent, owing to foreign timber being allowed to be imported free of duty, while, at the same time, the Jersey vessels are entitled to the privileges of British-built shipping; and the island now possesses about 280 ships (25,000 tons) excluse of nearly 500 fishing-smacks. The chief town and port is St Heller, from whence atcamers communicate with Southampton and Weymouth. Revenue of the island about £15,000, and debt £60,000. Exchange 8 or 9 per cent. In favour of England, or £1 sterling = £1, is. 8d. Jersey currency nearly. Guernsey, about 18 miles N.W. of Jersey, is 9 miles long, and 6 broad. It is not equal to Jersey in point of fertility, but its productions are similar. The island possesse saye currency nearly. Guernsey, shout 100 vessels, burden 10,000 tons, which are chiefly employed in the carrying trade with Spain, Portugal, Bracility and the productions are similar. The island possesses seem into Britain, it was much used as a depôt for wines and other goods; and an extensive illicit trade was carried on, which has now, however, wholly ceased. The only town is 8t Peter's Port

for its small breed of cattle. It possesses no good harbour. Sark is another small island depend-

ent on Guernsey.

All articles of the growth, produce, or manufacture of these islands are admitted into this country on payment of the duties (if any) imposed on similar British commodities; but their trade is subjected to certain regulations intended to prevent contraband traffic. An account of these will be found under the heads Cueroms Requirations and Navigation.

be found under the heads Currous Regulations and Navigation.

JET, or pitch coal, a species of coal of a deep black colour, with a brilliant resinous lustre. It is found in detached fragments in the amber mines in Prussia, where it is called black amber; also in Germany, France, and Spain. It is used as fiel; but the finer and harder pieces are worked into trinkets. Sometimes also it is used as an ingredient in varnishes and cements.

JETTISON or JACTURA, is the throwing overboard any part of a vessel or her contents, for the safety of the remainder, by enabling her to weather a storm or get off a shallow. When such an act takes place, the several persons interested divide the loss among them. [AVERAGE.]

JOANESE, or JOE, a Portuguese gold coin, worth about 36s.

JOCH, a German land-measure, containing 6889 sq. yds.

JOINT-ADVENTURE, a shipment made by two or more parties on joint-account. [Partnership.]

poount. [PARTNERSHIP.]
JOINT STOCK COMPANIES are a species of partnership to which all the lows affecting ordinary private companies apply, except in so far as they are incompatible with the nature of a public joint stock company. This is the position of the law in general as to joint stock companies, but in practice they are in almost every case materially distinct from private partnerships, by the special privileges respectively conceded to them. The leading distinction between joint stock and private companies is this, that, while the latter trade under the name of partners or presumed partners, and in all their transactions present to the public certain individuals as the parties principally liable, the former trade under a descriptive name, on the credit of their stock, and without any individuals appearing as responsible for the

sumed parties principally liable, the former trade under a descriptive name, on the credit of their stock, and without any individuals appearing as responsible for the engagements. Yet, by the mere creation of a joint stock company and the private agreement of the undertakers, the relief from personal responsibility cannot be accomplished. Unless where there are some of the special privileges described below, the general law of partnership still holds, so that each member is responsible for the debts of the whole; though in Scotland it is doubted whether this responsibility may not be obviated by holding out to the public that they are to trust to the capital only, and not to the individuals.

The next peculiarity of a joint stock company, and one that is essential to the existence of such a body, is, that the shares are transferable as articles of commerce, without the consent of the partnership. How far this can be accomplished voluntarily by the members is a doubtful point. Before the repeal of the Bubble Act, by 6 Geo. IV.c. 91, the creating transferable stock without proper authority, was one of the offences against which the act was aimed; but at the same time, whenever there was any regulation for checking unlimited transferability, such as, that the purchaser of the stock must sign the articles, or must be approved of by the directors, the courts were accustomed to sanction the proceeding; and it may be questioned if the transferability of stock can now be in any form suppressed. It is another general characteristic of a joint stock company, that it pursues and defends in the name of some office-bearer chosen for the purpose; but this is a facility which it can never possess except through the means by which such facility which it can never possess except through the means by which such

bodies acquire special privileges.

One of these means may be a charter of incorporation from the crown; but as this is an expensive and cumbersome arrangement, and gives but limited privileges, it is seldom had recourse to by an ordinary commercial association [CORPORATION]. Another method is by obtaining what is generally called a "private bill," but more properly a public local act. The preliminaries for obtaining such a measure are detailed under the head COMPANY. Wherever it is in contemplation to compel are detailed under the need Company. Wherever it is in contemplation to compoint individuals to part with their property at a just valuation, or to exact the price of the company's services in the form of a tax, an act is necessary. Hence an act must always be obtained for a railway, canal, harbour, gas, or water company. Since the passing of the statute by which the crown is authorized to issue letters patent to companies (abridged below), local acts have ceased to be necessary for mere commercial joint stock companies.

Shares in such companies may become the subject of ordinary commerce, and will be held as transferred where there is evidence of a mutual consent and transfer, independently of any fixed regulations by the company as to the form of proceeding. The managers of a joint stock company being in the position of trustees, are bound to adhere to the original objects of the company. In a late case in Scotland where a company was organized for the purpose of carrying goods and passengers between Leith and Australia, the managers, who were empowered to export and import goods, were found not entitled to take consignments of goods

port and import goods, were found not entitled to take consignments of goods guaranteeing the price on del oredere, or to trade at ports not intermediate between Leith and Australia.—(Maxton agt. Brown, 17th January 1839.)

Deed of Settlement.—The regulations of a joint stock company are generally embodied in the deed of settlement. This instrument "constitutes trustees of the partnership property, directors of the partnership affairs, auditors of its accounts, and such other officers as the objects of the society require, and contains covenants for the performance of their respective duties, which are specifically set out, as are those of the other partners or shareholders; it also defines the number of shares, the power and method of transferring them, and of calling for the instalments required to be made thereon; the mode of convening general meetings of proprietors.

tor the performance of their respective duties, which are specifically set out, as are those of the other partners or shareholders; it also defines the number of shares, the power and method of transferring them, and of calling for the instalments required to be made thereon; the mode of convening general meetings of proprietors, their rights when convened, and a variety of other rules suited to the exigencies of that particular undertaking."—(Smith's Mercantile L., 58.)

Companies under the Patent Act (viz. 7 Wm. IV. & 1 Vict. c. 73).—Letters patent may be granted under the great seal to individuals and their representatives, empowering them to sue and be sued through one of two registered officers, and limiting the amount of their individual responsibility to a certain sum per share. The company must be constituted by a deed of partnership, containing its designation, object, and place of business, with the designations of the members, and appointing two officers to sue and be sued. Within three months after the date of the letters patent a return of these particulars, and of the shares (as designated by their numbers) held by each individual, together with the extent of responsibility of each, must be made—in England or Ireland to the Enrolment Office of the Court of Chancery, in Scotland to the Register-house; and when transfers of shares are made a similar notice must be sent within three months. No person is entitled to a share of profits unless he be registered as a member, and every person is held to remain a member, and continues to be responsibile as such, until a return of his ceasing to be so is registered. When responsibility is limited to a certain sum per share, no action can be brought against a member for a larger sum than the unpaid balance of his subscription. When application is made to the crown for such letters patent, it is referred to the committee of privy council on trade and plantations; and before the letters are granted notice must be given by the applicants, in the London Gazette a

JUNK, or tchevu, a vessel of a grotesque form, used in the coasting and foreign trade of China, Siam, and Annam. The junks vary greatly in size; some exceeding 1000 tons. The best are made at Bankok, in Siam.

1000 tons. The best are made at Bankok, in Siam.

The immutable policy of the Chinese government appears to have early fixed the form of the junks, and now prohibits any change, under penalty of paying the high duties exacted from foreign ships. They are very much raised at both ends; the fore part is an even surface like the stern, and there is no keel. The masts (of a single spar such) are from two to four in number, and of very unequal dimensions; the mainmast being greatly larger than any of the rest; and on each mast there is commonly a single square sall, made of split bamboos, and stretched by poles; in some cases it furls and unfurs like a fan. Pumps are not made use of; the cables and rigging are of rattan or coir, and the anchors of ironwood, having the flukes occasionally tipped with iron. The hold is broad, though not deep, and the bottom almost completely flat. There is only one deck, but the hold is divided into about a dozen compartments, each belonging to a distinct proprietor, and separated from the others by planks, caulked with a cement consisting of lime and oil mixed with a few scrapings of bamboo. This arrangement, though it must diminish the stowage, has the advantage of preventing water from damaging the cargo in general, and even from endangering the safety of the vessel. The junks seem to have been first contrived with the view of plying in bays and rivers, for which they are well adapted. But when steered into the ocean, they do not take sufficient hold of the water to withstand those dreadful tempests which render the

sens of China perhaps the most perilous in the globe. The voyages, however, being always under-taken during a favourable monsoon, the Chinese set the head of their junk towards the quarter they are bound to, and blunder on with much less damage than might be expected.

JUREMA BARK, an astringent substance, the product of the acacia jursma, a native of Brazil.

JUTE, a kind of hemp, consists of the fibres of an annual plant (Corchorus olitorius) extensively cultivated in Bengal. It is used for cordage in India, and is now imported in considerable quantities into this country. The gunny bags in which sugar is brought from India are composed of this material. S

Κ.

KEEL, a flat-bottomed vessel used on the Tyne to carry coals. It contains, on an average, 8 Newcastle chaldrons = 15½ London chaldrons = 21 tons 4 cwt.

KEG, a wooden vessel or barrel containing 4 or 5 gallons.

KELP, an alkaline substance formerly prepared in large quantities on the N. shores of Scotland, by burning seaweed. [Barilla.]

shores of Sootland, by burning seaweed. [Barilla.]

The kelp trade existed about two centuries; but it was not till the year 1807, when the attention of the English manufacturers was drawn to it, that it became of importance. The cost of carting and burning the material, and hading it in boats, varied from 30s. to £3 a-ton in different places. The whole expenditure, before the kelp reached the consumer, averaged £4, and the prices obtained were generally £18, and sometimes even £29. These high rates only lasted till 1810, when the price gradually fell to £11, and subsequently to £8. Kelp caused to be made at a profit when the duty was removed from salt in 1817. The number of hands employed has been variously estimated at from 30,000 to 100,000; but the occupation lasted only during a few weeks in summer; and having carned enough for subsistence, the peasant could remain idle during the test of the year. The Highland estates became in this way burdened with a great surplus population, whose removal by emigration has been sines pressed with much force upon the government.—(Par. Report on Highland Emigration : 1841.)

KENTLEDGE, pigs of iron used for ballast.

KERMES, or Coccus tilicis, an insect found in large quantities on a small species of oak in many parts of Asia and the south of Europe, particularly Spain. It contains a red colouring principle; and, until the discovery of the cochineal insect, was the only substance used in dyeing scarlet from the period when the shell-fish producing the Tyrian purple of the Romans ceased to be employed. It is still used in Barbary and the Levant for dyeing the scarlet caps so much worn in those countries. In Europe it is almost entirely superseded by cochineal.

in those countries. In Europe it is almost entirely superseded by cochineal.

The same term is likewise applied to a factitious sulphuret of antimony, commonly met with in the form of a brown-red powder.

KERSEYMERE, a thin stuff generally woven plain from the finest wools, and made chiefly in the west of England. Kersey is a very coarse stuff, usually ribbed, and woven from long wool. It is chiefly manufactured in the north of England. KILLOW, a Turkish corn-measure, varying in different places. [Turker.] KILOGRAMME, a French weight, equal 2½ lbs. avoird. nearly. KILOMETRE, a French itinerary measure, equal 1093 yards, or about 5

KILOMETRE, a French itinerary measure, equal 1093\(\) yards, or about 5 furlongs.

KINGWOOD, a farcy wood, the product of a small tree found in Brazil, the botanical name of which is unknown. It is extremely hard, of a dark chocolate colour, with black veins. It is chiefly employed for small cabinet-work.

KINO, an astringent gummy substance, of which there are several kinds. Much uncertainty exists regarding the erigin of this commodity. East Indian kino is said to be the produce of the Butea frondosa (Roxb.), a tree or shrub common in that part of Asia; African kino is generally stated to be derived from the Ptercoarpus erinaceus (Linn.), a native of Gambia; the Australian variety is procured from the Eucoloptus resingfera (White); and the American is said to be the juice of the Cocoloba uvifera of the West Indies. Kino generally occurs in shining grains, of a rich ruby-red colour, readily pulverizable, and nearly all soluble in water and in alcohol. In India it is used for communicating a nankeen colour to cotton. It is also an article of the materia medica.

It is also an article of the materia medica.

KIRSCHWASSER, an alcoholic liquor, made in Germany from Cherries.

KIRSCHWASSES, the small kind of grape from which Shiraz wine is obtained. It is produced in Persia, from whence considerable quantities are sent to India when dried into raisins. Their price is regularly quoted in the Indian prices current.

KNIVES (Du. Messen. Fr. Couteaux. Ger. Messer. It. Coltelli. Por. Facas. Rus. Noshi. Sp. Cuchillos). [Iron Manufactures.]

KNOT, in navigation, the division of the Log-Line, corresponding to one mile.

KORSEC, a Polish corn-measure, equal, at Warsaw, to 3½ Imp. bushels.

KREOSOTE, or CREOSOTE, a peculiar liquid of recent discovery, which is obtained by a complicated process from wood-tar. When pure, it is colourless and transparent, of a burning caustie taste, and a strong penetrating odour, resembling that of smoked meat. Sp. gr. 1°037. It burns with a very soot flame. Kreesete possesses powerful antiseptic properties. Meat and fish are preserved after having been brushed over with it and dried in the sun; and it appears to be the principle to which the antiseptic powers of wood-smoke and pyroligneous acid are due. Its action upon the animal system is energetic. In medicine it is employed externally for toothach, cancer. &c.: and internally as a stimulant. ployed externally for toothach, cancer, &c.; and internally as a stimulant. KREUTZER, a German coin, worth about one-third of a penny.

L.

LABDANUM, a resinous substance, obtained from a small shrub (Cistus Creticus), which grows in Crete and Syria. It is used in the preparation of plasters. The best is in dark-coloured masses, of a soft consistence, becoming still softer on being handled. It is greatly adulterated by the addition of black sand.

LABURNUM, a well-known tree (L. Cytisus) which, when of sufficient dimensions, is well adapted for cabinet-work. It possesses an oily property, which fits it for pins of blocks, and cogs in mill-work, as its unctuous nature prevents it from being abraded; indeed, wherever any very hard and compact timber is required in small pieces, there are few superior to it. Its natural colour, too, is good; and it may be rendered almost black by the application of lime-water.

LAC, in Hindoo numeration, denotes 100,000. A lac of rupees is, therefore, nearly £10.000 sterling.

nearly £10,000 sterling.

LAC (Arab. Laak. Du. Gomlac. Fr. Lacque. Ger. Lack. Hind. Lak'h. It. LAC (Arab. Laak. Du. Gomlac. Fr. Lacque. Ger. Lack. Hind. Lak'h. It. Lace. Por. Lace em páce), a resinous or waxy substance, deposited by an insect (Chermes laces) on various kinds of trees in the East as a defence for its eggs, and to supply food for the maggot in a more advanced state. It is known under the names of stick-lac, seed-lac, lump or cake lac, and shell-lac. Stick-lac is the substance in its natural state before its separation from the twigs which it incrusts, being gathered before the insects have left their cells; and the best is of a red purplish colour. According to Mr Milburn, it may be had in almost any quantity; the only trouble in procuring it being to break the branches and carry them to market. Seed-lac is the stick-lac separated from the twigs, appearing in a granulated form, and deprived of part of its colouring matter by boiling: this is seldom imported, it being almost all manufactured into shell-lac in India. Lump-lac is the seed-lac melted and formed into cakes. Shell-lac, the most common form in which it is known in Europe, is the substance liquefied, strained, and formed into thin transparent lamins. The value is estimated according to its transparency and lightness of colour. The best is of a bright orange; the liver-coloured is inferior; and that which is very thick, dark, or speckled, should be avoided. The quality of shell-lac has of late years been greatly improved; and the quantity imported is much increased. In the East it is used for making trinkets. In this country it is the basis of the best sealing-wax, and is also used to form ink and varpuntry it is the basis of the basi scaling-war, and is also used to form ink and varishes. It is now likewise employed extensively in hatmaking.

Lac is an article of commerce in Bengal, Siam, Annam, Ceylon, Pegu; and, ac-

cording to Mr Crawfurd, the insect exists in most of the forests of the Indian Islands. About 3,000,000 lbs. of shell-lac are annually imported, wholly from Bengal,—

About 3,000,000 lbs. of shell-lac are annually imported, wholly from Bengal,—nearly one-half of which, however, is re-exported to Italy, Belgium, Russia, Germany, and other parts of the Continent. S

LAC-DYE, LAC-LAKE, are two preparations of the colouring matter of stick-lac: the former is by far the most valuable. They are imported in small square cakes, similar to those of indigo. They should, when broken, look dark-coloured, shining, smooth, and compact; and when scraped or powdered, of a bright red hue. They are used as red dyes for some purposes, instead of cochineal. Lacdy is a valuable dye-stuff, but it still admits of considerable improvement. Upwards of 1,000,000 lbs. are annually imported, only from Bengal,—nearly one-half of which is again exported to Italy, Germany, and other parts of the Continent.

LACE and BOBBIN-NET MANUFACTURES. The origin and early history of the lace-manufacture are involved in obscurity. It is supposed to have been known to the ancients, and to have been introduced into this country, or at least

materially improved, by Flemish refugees who settled in the counties of Buckingham and Bedford. The original fabric, and that which is still in highest esteem, is called pillow lace,—being worked by the hand upon a pillow or cushion, stuck, according to the pattern, with pins, around which linen or silken threads are twisted and woven off a series of bobbins, or small cylindrical pieces of wood. The manufacture of this kind of lace is carried on in several of the midland counties, in the west of England, and at Honiton in Devonshire, where the finest British lace is made. On the Continent its chief seats are Brussels and Mechlin in Belgium,—places which have long maintained a pre-emisence in this manufacture; and Valenciennes, Alençon, Caen, and Bayeux in the north of France. But lacemaking by the hand has now greatly declined, owing to the extreme cheapness of that made by machines, called bobbin-net,—the manufacture of which has of late years risen into high importance both in this country and in France.

The bobbin-net trade is a branch of the cotton manufacture; the net being almost invariably formed of that material. It originated in successive improvements and alterations on the stocking-frame, by which it was adapted to the weaving of lace; though it is deserving of notice that it could have had no existence but for Samuel Crompton's invention, the mule [Cotton Manufacture] which spins yarn suitable for that delicate fabric. The application of the stocking-frame to lacemaking was first attempted by a frame-work knitter of Nottingham, named Hammond, about 1768; but it was not rendered completely successful till after improvements by John Heathcoat, also of Nottingham, for which a patent was secured in 1809. His improvements were of so important a character as to entitle him to be justly considered the inventor of the lace-frame, and the father of the bobbin-net manufacture. The lace-frame was simplified in various ways during the continuance of the patent; and, on its expiry in 1823, so much ingenity was brought to bear upon this machine, that its speed was increased twelve-fold, and it was fitted to be propelled by steam and water power. Means were besides discovered for making the net into slips of various widths,—some as wide sa 4 yards,—instead of only one broad piece, as at first; and likewise to work various ornaments into it by the aid of machinery, which, in point of complex ingenuity, far surpasses that used in any other branch of human industry. "One of Fisher's spotting-frames," according to Dr Ure, " is as much beyond the most curious chronometer in multiplicity of mechanical device, as that is beyond a common roasting-jack." The combined effect of these improvements is, that fabrics, for which £5 were paid during the existence of Mr Heathcoat's patent, may now be purchased for 2s. 6d.

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The growth of the bobbin-net trade after 1823 was as rapid as that of the cotton manufacture after the nullification of Arkwright's patent. But a vast amount of capital was sunk during the development of the improvements on Mr Heathcoat's frame:—out of 5000 machines, the 3500 first constructed at a cost of £2,000,000, were, in the course of a few years, by this cause alone, depreciated to one-tenth of their value,—to say nothing of the number of frames destroyed during the Luddite crusade against machinery in the years 1811-12. Much distress was also occasioned in the same period, by the decline of profits and wages, consequent on the excessive amount of capital and labour which flowed into the trade.

The great seat of the hobbin-net trade in this country is Nottingham: but it is

The great seat of the bobbin-net trade in this country is Nottingham; but it is also extensively prosecuted at Leicester, Derby, Tiverton, and the west of England. We possess no authoritative estimate of its amount more recent than 1836. In that year the cotton yarn (mostly Nos. 180, 190, and 200) used in it required 1,850,000 lbs. of Sea-island wool, worth £185,000; and silk was consumed of the value of £25,000; making the total worth of the raw material £210,000. The gross return amounted to £2,212,000; consisting of plain net, £660,000; quillings, £492,000; and embroidered goods, £1,060,000. The sales for home consumption were in plain nets, about £320,000; quillings, £210,000; embroidered goods, £380,000; total, £1,110,000. The foreign trade took off about £340,000 plain nets; £282,000 quillings; and £480,000 figured goods; total, £1,102,000. The progress of our foreign trade since 1836 cannot be stated with precision, as bobbin-net does

^{*} Mr Heathcoat removed to Tiverton soon after he had obtained his patent, owing to the riotous attacks made on his lace-frames at Nottingham,—that town having become, through the ignorance of the workmen, the head-quarters of an extensive conspiracy against machinery, known by the name of Luddism, in the counties of York, Lancaster, Nottingham, Derby, and Chester; and which was only put down after many men had atoned by their lives for their acts of outrage. Mr Heathcoat began life in humble circumstances, and made his fortune by his happy invention; and, being at once a man of talent and of business, he now fills the honourable station of member of parliament for Tiverton.

not appear under a separate head in the government returns; but its amount is not supposed to have increased. The exports are chiefly made to the United States, Germany, Belgium, France, the British Colonies, and South America. & The following are the principal kinds of lace usually met with in trade:—
Bartiss Lack.—Nine sorts may be distinguished:—1st, Quilling Nets; these differ in width from a small fraction of an inch up to \(\frac{1}{2}\) yard; which several widths are also sometimes denoted by the number of meshes from selvage to selvage. The criteria of good quality are—perfect freedom from any fibrous appearance on the substance of the net; clearness and distinctness in the meshes; absence of knots and rags from the selvages, and of any unpleasant stiffness from the face generally. 2d, Bobbin or Piece Nets, to which the same observations apply, may be had of various widths, from \(\frac{1}{2}\) to \(\fra

of this snuggled lace, however, is merely British lace with French embroidery.

LADING, BILL OF. [BILL OF LADING.]

LAMP-BLACK, a substance obtained by burning the impurities left in the precipitation of tar and pitch, and collecting the particles carried off and deposited in the form of soot. The finest kind is procured by collecting the smoke from a lamp which supplies more oil than can be perfectly consumed. Its quality depends on its lightness and fulness of colour. It is used in the arts, particularly in the manufacture of printers' ink.

LAMPREY, a cartilaginous fish (Petromyson marinus) resembling an eel, common during spring and summer in some of the rivers on the south coast of England, particularly the Severn, which it ascends from the sea for the purpose

common during spring and summer in some of the rivers on the south coast of England, particularly the Severn, which it ascends from the sea for the purpose of depositing its spawn. It is found in smaller numbers in several of the Irish and Scottish streams. The potted lampreys of Worcester are in high estimation.

LANCEWOOD, the timber of a tree (Guatteria virgata) indigenous to Jamaica, and which, though not of very great size, is highly valued from its exceeding even ash in lightness, strength, and elasticity; hence, it is admirably calculated for shafts to carriages, handles to spears, and similar purposes. It is neither so close-grained nor so hard as box, but it turns well; in colour it is lighter than box.

LAND-TAX or CESS, a British impost on rent, which became a permanent source of revenue in the end of the 17th century, superseding the occasional subsidies of the feudal government. It proceeded on valuations of the rental of the kingdom, made in Scotland in 1674, and in England in 1692; on which last a tax of is. a-pound was calculated to yield a clear annual revenue of £500,000. These valuations have ever since furnished the canons of assessment. The tax was granted by parliament from year to year, at various rates, until 1798, when it was fixed valuations have ever since furnished the canons of assessment. The tax was granted by parliament from year to year, at various rates, until 1798, when it was fixed permanently at 4s. a-pound (38 Geo. III. c. 5, and c. 60). The object of rendering the tax perpetual was to facilitate the raising of money by its redemption or purchase by the proprietor of the land; and various provisions were made for this purpose, which, however, have been since modified, particularly in 1811 and 1812, when the management was transferred from special commissioners to those for the affairs of taxes. The assessment is levied under the authority of local commissioners but have a late act (18 2 Vice 45) the proper selecting to its redemption sioners; but by a late act (1 & 2 Vict. c. 58) the powers relating to its redemption are transferred to the Treasury.

We possess no very recent account of the amount redeemed: but a report made by the commissioners in May 1828 states, that down to that time the number of sales effected had been 3593, the value thereof being £1,438,513; and the total amount of tax redeemed thereby could not be fairly estimated at less than £63,100 per annum. The sum remitted to the Exchequer in the year 1840 was, in England, £1,145,082; in Scotland, £36,201; total, £1,181,283. In the last-mentioned country the tax was limited by the Act of Union in 1707 to £48,000 (deducting all expenses); and in 1798 it was fixed at £47,954, ls. 2d.

all expenses); and in 1798 it was fixed at £47,954, is. 2d.

LANDWAITER, a custom-house officer, whose duty it is to take an account of

goods imported.

LAPIS LAZULI. [AZURE STONE.]

LAPIS LAZULI. [AZURE STONE.]

LARCH. [PINE.]

LARCH, the fat of the omentum and mesentery of the pig. When properly freed from membranes and blood by being picked, kneaded in water, melted and strained through linen, it should be white, pultaceous, in thin layers, somewhat tough, without smell, of a sweetish taste, and melting at 100° Fahr. It is to be kept in a cool dry situation, in vessels with a cover, luted on with linen, smeared with white of egg and powdered lime; but notwithstanding every precaution it at length becomes rancid. Lard is employed in the formation of ointments, plasters, liniments, and for other medical purposes. It forms an article of export from Waterford, Limerick, and other places.

other medical purposes. It forms an armore of export from waveform, hamofron, and other places. S

LAST, a metrical term, of German origin, used to express a load, burden, or quantity of certain articles, commonly of a bulky nature. In this country the last of corn is 10 quarters or 29 078 French hectolitres; on the Continent, however, it is generally rated higher. The last of herrings, tar, pitch, potash, cod-fish, meal, scap, and other articles, is commonly reckoned at 12 barrels (12 Ch. 11., 38 Geo. III., &c.); but the last of gunpowder is 24 barrels or 2400 lbs. The Prussian ship-last is 4000 Prussian lbs. = 4124 lbs. avoird. At Dantzic the last of timber is 80 cubic feet.

LASTING, a woollen stuff used in making women's shoes.

I.ATHS (Ger. Lattern). long thin pieces of wood nailed to the rafters of a wall

LATHS (Ger. Latten), long thin pieces of wood nailed to the rafters of a wall

er roof to receive the plaster.

LATTEN, a plate or sheet of iron, tinned over.

LAUDANUM, a soporific tincture made from Opium.

LAVENDER, a plant (Lavandule spice) yielding the well-known oil and distilled waters which bear its name. Both of these are obtained in greatest proportion from the flower-spikes which have been gathered in dry weather before they are fully expanded. Lavender is extensively cultivated near London, particularly at Park Place, near Henley-on-Thames. The English oil is preferable to that imported from the Continent

LAWN, a fine sort of cambric. It is made in Scotland and Ireland, but the

best is imported from France.

LAY-DAYS, a certain number of days during which a merchant is entitled to delay a vessel in loading and unloading. [APPREIGHTMENT. DEMURRAGE.]

LAZARETTO, a name given to those enclosed buildings, common in the Mediterranean ports, in which ships' crews, passengers, and goods arriving from places where the plague is known to prevail, are lodged for the performance of QUARAN-

LEAD (Fr. Plomb. Ger. Blei. It. Piombo. Du. Leod. Por. Chumbo. Rus. Swinets. Sp. Plomo), a soft and flexible metal, of a pale livid gray colour, easily malleable, but slightly tenacious and not sonorous. Sp. gr. 11.35. It melts at 612° Fahr.,—a much lower heat than affects most other metals. Exposed in the open air, it soon tarnishes; but the oxidisement never proceeds far. Water when pure

Fahr.,—a much lower heat than affects most other metals. Exposed in the open air, it soon tarnishes; but the oxidisement never proceeds far. Water when pure does not act upon it, though it greatly facilitates the influence of the external air.

The lead mines of Britain are of great importance; and those of Derbyshire are said to have been wrought prior to the Roman invasion. The most productive at present are situated in Northumberland, Cumberland, Durham, Derbyshire, Flintshire, Snafield in Man, and at Leadhills in Scotland. The metal is rare in Ireland. Nearly all the produce of the British mines is obtained from the sulphuret called galena, in which lead is in combination with sulphur in the protection of 86 parts of metal to 14 of sulphur. The ore, after having been washed portion of 86 parts of metal to 14 of sulphur. The ore, after having been washed and picked, is reasted in order to disengage the sulphur; then mixed with fuel, it is placed in the smelting furnace. When tapped from this it runs down a straight channel technically called the sow, from which branch off on each side some smaller channels named pigs; in these it cools, and from them receives the appellation of pig lead.

Lead is of common and extensive use in the arts. Alloyed with tin, in different proportions, it forms solder and pewter; and with antimony it constitutes type metal.

Combined with oxygen it forms massicot, a protoxide of a pale yellow colour;

https://doi.org/10.1007/html.com/ht ores, enters largely into the composition of flint-glass; minium, or red lead, a deutoxide, extensively used as a paint, and also in the manufacture of flint-glass: the carbonate of lead, or white lead, is a dense white powder, commonly employed as a pigment; the chromate of lead, of a beautiful yellow colour, is also much used as a pigment; and the acetate of lead, called sugar of lead, is employed

much used as a pigment; and sate accessors.

The pure metal is used for numerous machines and utensils; but its chief employment is in the form of sheets, pipes, and shot. Sheet-lead is melted and cast; the thickness of the sheets being frequently reduced by means of heavy rollers worked by steam-power. The sheet is of different thicknesses, but always weighs 9 cwt., so that its length and breadth will be greater in proportion to the diminution of its thickness. In trade, the sheets are described as being of so many pounds weight the sheets are sometimes made in a rough way by its thickness. In trade, the sheets are described as being of so many pounds weight to the superficial square foot. *Lead pipes* are sometimes made in a rough way by bending sheet-lead over a mandrel, and soldering the edges together; but more bending sheet-lead over a mandrel, and soldering the edges together; but more commonly by casting the pipe in an iron cylinder, having a concentric iron rod or core, and afterwards drawing the pipe through a succession of holes in steel plates, diminishing gradually in diameter, whereby the pipe is lengthened, while its substance is reduced; and the machinery employed for this process is now so perfect, that a faulty pipe is rarely met with. Lead shot is prepared by pouring molten lead, in a peculiar manner, through a colander, or perforated plate, placed on the top of a high tower, from whence the globules descend into a tub of water on the floor: the shot thus made is of various sizes, but it is afterwards sorted by more of a castic of sizes, but in maches of different degrees of figures.

on the floor: the shot thus made is of various sizes, but it is atterwards sorted by means of a series of sieves, having meshes of different degrees of fineness.

The quantity of lead produced in this country is so considerable, that there is a regular surplus for exportation. Mr Brande estimates the smelted lead annually afforded by the British mines at 48,000 tons, which, at £19, 10s. a-ton, the present price of pig-lead, would make the produce worth £936,000. Little dependence, however, can be placed upon the accuracy of such estimates, as the individuals by whom some of the most productive of our mines are worked, studiously conceal the amount of metal which they raise. Nor is much light thrown upon the subject by the custom-house records as the extent of our exports is, in a great degree, governed of metal which they raise. Nor is much light thrown upon the subject by the custom-house records, as the extent of our exports is, in a great degree, governed by the comparative productiveness of foreign mines, and particularly by those of Adra, in the province of Granada in Spain, the working of which is liable to considerable fluctuation. In ordinary years, the produce of the latter may be stated at 20,000 tons, two-thirds of which are sent to France, while from 1500 to 3000 tons are brought to this country, from whence again, however, it is almost wholly re-exported. The ordinary exports of British lead amount annually to about 15,000 tons, four-fifths of which consist of pig and rolled lead and shot, the remainder being white and red lead and litharge: it is chiefly sent to India, the colonies, Russis, Germany, Holland, and Brazil.

There are many lead mines in Saxony, Bohemia, Silesia, and other parts of Germany; they are also worked, though not on a great scale, in the United States, principally in Missouri. 8

The fodder of lead at London and Hull is 19; cwt.; at Newcastle. 21 cwt.: at Chester. 20 cwt.:

The fodder of lead at London and Hull is 19½ cwt.; at Newcastle, 21 cwt.; at Chester, 20 cwt.; at Stockton, 22 cwt.; at Derby, 22½ cwt. The cwt. of lead at Hull and Chester is 120 lbs. The load of lead ore of 9 dishes = 3 cwt. nearly.

load of lead ore of 9 dishes = 3 out. nearly.

LEAD, BLACK. [Plumbago.]

LEAGUE, an itinerary measure, reckoned in this country at 3 geographical or nautical miles, or the twentieth part of a degree of latitude, which is very nearly equivalent to 6076 yards, 3 ft statute miles, or 5 555 French kilometres. The same measure is generally used by foreign nations for nautical purposes. A variety of other leagues are used on the Continent, particularly in France, where they are the cause of much confusion. An account of the leagues used in foreign states will be found under the heads of those states respectively.

LEAKAGE, an allowance made for waste or loss of liquors.

LEAK AGE, an allowance made for waste or loss or inquors.

LEASE. [INTEREST, COMPOUND, AND ANNUTIES.]

LEATHER (Fr. Outr. Ger. Leder) consists of the dressed skins of animals.

For converting skins into leather, different processes are followed, according to their nature and the kind of article required; as tanning, or causing them, after being freed from impurities, to unite with astringent vegetable matter, by which they are rendered no longer liable to undergo putrefaction, insoluble in water, and in a great measure impervious to it; towing or soaking them in alum and other salts, with some animal substance; and currying or beamearing them with oil to render the leather soft and completely impervious to water. These processes are often performed on the same skin, by which the leather is fitted for different purposes. The thick hides, of which the soles of shoes are made, are merely tanned, while the thin ones used for glove leather and morocco, are tawed, except when intended to be dyed, when they also receive a slight tanning in an infusion of sumach. That for the upper leather of boots and shoes is both tanned and curried, and fine Turkey leather is first tawed and afterwards tanned.

leather is first tawed and afterwards tanned.

The leather manufacture in this country is one of very great importance, but we have not at present any means of ascertaining its amount, the excise-duty formerly levied having been repealed in the year 1830. As at that time, however, the quantity of unwrought leather produced in England and Scotland was nearly 60,000,000 lbs., we may estimate the present annual production of the United Kingdom at from 80,000,000 to 85,000,000 lbs., and its value at about £5,500,000. The aggregate value of the leather goods is estimated by some at three times, and by others at four times that of the raw material making the amount of the manufacture. others at four times that of the raw material making the amount of the manufacture, on the former supposition, £16,500,000, on the latter, £22,000,000. The total number of persons employed in all the branches, including tanners, curriers, shoemakers, glovers, saddlers, &c., is computed at from 250,000 to 300,000.

The exports, though not considerable, are rather on the increase; the quantity, wrought and unwrought, annually shipped, amounts to nearly 2,500,000 lbs., of the declared value of £380,000, besides saddlery and harness to the value of £90,000. These exports are almost wholly to the colonies, especially India, the West Indies, and the United States.

and the United States. In 1821, the revenue derived from the duty of 3d. a-pound, which then existed on leather, amounted to £600,282. In 1822, the rate was reduced one-half; but, owing to the greater stimulus given to consumption by this reduction, the revenue suffered only to the extent of one-fourth,—the lower duty having produced on an average of the seven following years, which elapsed before it was entirely repealed, no less than £407,814. The reasons assigned for the abolition of this light and productive duty were, that it was unequal in its operation, falling with disproportionate pressure upon the humbler classes, and that the excise regulations, under which the manufacture was placed, formed an obstacle to the improvement of the quality.

of the quality. S

LEDGER, in book-keeping, the principal record of a merchant's transactions.

It is arranged so as to distinguish the debt or property belonging to each individual

or account respectively.

or account respectively.

According to Dr Kelly, "the name of this book, in the Italian and other southern languages of Europe, signifies the master-book; in French and Dutch, the great book; and in German and other northern languages, the head book. The derivations given of ledger in our principal dictionaries are fanciful and contradictory. According to Balley, it comes from the Latin verb leger, to gather; and Dr Johnson says it is derived from the Dutch verb legger (a typographical error for leggen), to lie or remain in a place. The word is perhaps derived from the sleger books, kept in feudal times for the purpose of recording the rents, services, and duties of tenants, who were called liegemen."—(Book-keeping: Introd. p. vil.)

ltegemen."—(Book-keeping: Introd. p. vii.)

LEECH (Fr. Sangsus. Ger. Blutigel), a fat, alimy, annulose, parasitic worm (Sanguisuga, Savigny), generally inhabiting stagnant waters, celebrated for its medical use in cases requiring local blood-letting. Two species have been chiefly employed for this purpose: The German or gray leech (S. medicinalis), a native of the N. of Europe, having a deep green body, marked with six longitudinal iron-coloured bands, pretty clear, and spotted with black points; its belly greenish, spotted, and bordered with black; and the segments of the body rough from granular eminences: The Hungarian or green leech (S. officinalis), found in the S. of Europe, having a large green, or light blackish green body, the back being marked with six iron-coloured bands, spotted at their middle portion and edge; the belly, yellowish green, without spots, but broadly bordered with black; and the segments of the body very smooth: of this kind there are three varieties. One German leech is deemed equivalent to two Hungarian leeches. These animals attain maturity in from 5 to 8 years, and may live twenty. They are generally caught by the hand, or by a person wading may live twenty. They are generally caught by the hand, or by a person wading in the shallow waters during spring, when they adhere to his naked legs: in summer, when they retire to deeper waters, they are usually entangled by means of a raft constructed of twigs and rushes.

As leeches are now scarce in Western Europe, nearly all our supplies come from Hamburg dealers, who procure them from the Ukraine. "Having exhausted all the lakes of Silesia, Bohemia, and other more frequented parts of Europe, the buyers are now rolling gradually and implacably eastward, carrying death and desolation among the leeches in their course—sweeping all before them, till now they have got as far as Poltava, the pools and swamps about which are yielding them great captures" (Brenner's Russia, vol. ii. p. 408; 1839). They are sometimes

imported in bags, but more usually in small barrels, each holding about 2000, the head being made of stout canvass to admit the air. Many sicken and die on the journey from the place of capture, especially during warm weather. Mr Pereira, in his Materia Medica, states that the best vessels for preserving these animals

journey from the place of capture, especially during warm weather. Mr Percira, in his Materia Medica, states that the best vessels for preserving these animals are unglazed brown pans or wooden tubs; the leaden glazing being supposed injurious. These pans should be very little more than half-filled with soft water. In very hot weather, when the water becomes discoloured, it should be changed every day; otherwise, in summer every four or five days, and in winter once a-month is believed by large dealers to be sufficient. The consumption of leeches is enormous. Some years ago it was stated that four principal dealers in London imported, on an average, no fewer than 600,000 monthly.

LEGHORN. [Tuscanv.]

LEMONS (Fr. Limons. Ger. Limonem. It Limoni. Por. Limoss. Sp. Limones), the fruit of a tree of the citron or orange family (Citrus limonum), a native of Eastern Asia, from whence it has spread to Greece, Italy, and other parts of the S. of Europe. The fruit is oblong in shape, and its juice is analogous to that of the orange, from which it only differs in containing more citric acid and less sugar. The quantity of the former is very great (CITRIC ACID), and, being an approved specific in the prevention and cure of scurvy, a powerful and agreeable antiseptic, as well as an ingredient in punch and many pleasant refrigerant drinks, it forms, in an expressed state, an important article of trade, especially in Italy: being liable to ferment, it is, when exported in this condition, secured in bottles, and covered with a thin stratum of oil. The rind is a bitter aromatic, and is frequently employed in stomachio tinctures, and for preserves and liqueurs; it also yields an essential oil, which is much used in perfumery. For these purposes, lemons are largely consumed in this country; the best are brought from Spain, but they are likewise imported from other places, particularly Portugal and the Azores.

LETTER OF ATTORNEY, or POWER OF ATTORNEY, is simply a deed authorizing some person to act for the granter in any matter w

sent work. The powers usually conveyed by the ordinary letter are to collect debts, transfer stock, sell commodities, invest money, receive dividends, or similar purposes. A pure letter of attorney to serve the objects for which such a document is intended is revocable, but when it is used as a transfer or assignment, and does not merely authorize the attorney to act for the granter, but puts him in his place not merely authorize the attorney to act for the granter, but puts him in his place (e.g. where a party gets authority to collect accounts, as a consideration for money advanced), the authority is irrevocable. A person holding a letter of attorney represents his principal solely through that authority, and both he and third parties are limited to its terms, and responsible when they are exceeded. There is thus no room for those disputes regarding the powers implied in the nature of the contract, which occur in the case of principal and agent. The power, however, may be either special as to particular transactions, or general as to all a party's proprietory affairs; and it may or may not include a factorship or agency, the terms of which must be interpreted according to the rules applicable to those branches. [FACTOR. PRINCIPAL AND AGENT.] A person acting under power of attorney must do so in the name of his principal, and not in his own. A letter, unless it contain an assignment, falls on the death of the principal. If not so terminated or revoked, the power exists till its purpose is fulfilled, and if clearly expressed, will authorize the subsidiary procedure necessary to bring about the main end; thus a letter to sue for, receive, and recover a debt authorizes the attorney to arrest the debtor.—(Compus Digest: Attorney, c. Paley on Principal and Agent, p. 180-192.)

LETTER OF CREDIT, a letter from one mercantile correspondent to another.

LETTER OF CREDIT, a letter from one mercantile correspondent to another, requesting him to advance money to a certain amount to the bearer, or a third party named. The letter should also describe the manner in which the money is to be reimbursed, and the nature of the voucher to be taken for it. The granting of such a letter is generally announced in course of post to the correspondent; a duplicate of it being sent at same time, and the signature of the party in whose favour the credit is established, or a description of him, in case the document should fall into improper hands.

LETTERS OF MARQUE, in their original acceptation, mean a warrant by a sovereign, authorizing a subject who has received injury from any inhabitants of another tasts to make reprisal on these tasts. In this acceptation, the issuing

another state to make reprisals on that state. In this acceptation, the issuing

letters of marque does not necessarily accompany a declaration of war; indeed it would appear to be a measure of retaliation, to be resorted to when the aggression on the other side is not sufficiently extensive or public to call for national hostilities. Thus, the 4 Hen. V. c. 7, provides for the granting of letters to those who are aggrieved by foreigners during time of truce. This species of warrant has, howaggrieved by foreigners during time of truce. This species of warrant has, however, been long in disuse; and letters of marque have of late been granted in conformity with the provisions of acts for manning the navy, and are virtually commissions to privateers. They have two advantages, lst, They authorize private vessels to fight with enemies without becoming liable to a charge of piracy; and, 2dly, They preserve to the owners, officers, and crews, the prizes made by privateers, which would otherwise fall to the crown. For the conditions under which letters of marque have thus been in use to be granted, see 45 Geo. III. c. 72, § 9-15.

LETTUCE, a well-known succulent vegetable (Lactuca sativa), used as a salad. After its flower-stem shoots, it abounds with a milky jujec, possessing soporific

LETTUCE, a well-known succulent vegetable (Lactuca sativa), used as a salad. After its flower-stem shoots, it abounds with a milky juice, possessing soporific powers, and which, in the strong-scented wild lettuce (L. virosa), is so abundant that it has been used as a substitute for laudanum and opium.

LEVANTINE, a stout, close-made, twilled, silken fabric, now little used.

LIABILITIES, a term applied in a comprehensive sense to all the pecuniary obligations of an individual or company.

LIBRA, the Latin, Spanish, and Italian name for a pound in weight; also a Spanish money of account, varying in different provinces.

LICENSE, an official grant of permission. Licenses are required in this

Spanish money of account, varying in different provinces.

LICENSE, an official grant of permission. Licenses are required in this country for procecuting various trades and professions, as pawnbroking, appraising, officiating as suctioneer, banking, dealing in plate, distilling spirits, beer-brewing, malting, dealing in wine, spirits, beer, cider, coffee, and tobacco, and for the making of glass, soap, and other commodities, an account of which will be found under their appropriate heads. These licenses are issued by the Boards of Excise and Stamps. Licenses are also required for certain kinds of vessels, luggers, and boats, under the art for the prevention of Swiggers.

their appropriate heads. These licenses are issued by the measure of manuscriptions and Stamps. Licenses are also required for certain kinds of vessels, luggers, and boats, under the act for the prevention of Shuggeline.

LIEN on RETENTION is a right which the law gives to individuals in certain situations, to retain property of another which may be in their custody, until certain claims of the custodier against the proprietor be satisfied. To constitute lien, the possession must have been legally obtained for the purpose out of which the claim of lien arises, and must not be the result of force, fraud, or accident. The possession must be actual, either through the creditor or one of his agents. Liens are of two kinds, special and general. The former is the simple retention of the property, which has been the subject of some contract, implying payment on the one side and delivery on the other,—the delivery being delayed until the payment is made. Persons bestowing labour or skill in improving the value of any moveable, have generally a lien over it; as, a miller, a shipwright, a tailor, a dyer, a is made. Persons bestowing labour or skill in improving the value of any move-able, have generally a lien over it; as, a miller, a shipwright, a tailor, a dyer, a bleacher,—each on the commodity passing through his hands. Carriers and ship-owners have a lien for the property they convey; but there is none for dead-freight or demurrage, unless it be stipulated for. There appears to be no lien on a pas-senger or the clothes he wears, though there may be on his luggage. Innkeepers and stablers, being under an obligation to receive guests and their cattle, are said to be provided by the law with this efficacious remedy as a counterpart of their obligation. Livery stablers and agister (or persons affording pagure to their obligation. Livery stablers and agisters (or persons affording pasture to cattle at so much per week) have no such lien in England; in Scotland, however, a different doctrine seems to be held, that "the lien would be given on the broad

a different doctrine seems to be held, that "the lien would be given on the broad principle, that it is the resulting security for the actio contraria in all cases" (Bell's Com. II. 104). A special lien is easily created by the usage of trade, and may at any time be stipulated as an article in a contract.

General Lien is of a more complicated description, being the right to retain for a general balance arising in the course of a series of transactions. An express contract, or a contract to be clearly implied from the previous destings of the parties, or a distinct course of commercial usage, is required to constitute such a lien. "To establish a general lien on the ground of usage, strong and satisfactory evidence must be adduced of ancient, numerous, and important instances, in which the right has been exercised. When the usage is general, and prevails to such an extent that all parties contracting may be supposed conusant of it, they will, of necessity, be bound by the custom: for the usage of trade amounts to evidence of contract; and where such usage is general, and has been so long established as to afford a presumption of its being commonly known, it is only fair to conclude that the parties contracted with reference to it" (Cross, 15). It would appear that the usage of a district may have the effect of at least excluding a species of lien, ac-

knowledged by the law to hold good in places where it is practised. A law-agent or attorney has a general lien on the papers of his client coming into his hands in the proper course of his business. Calico-printers, dyers, and wharfingers have a general lien in their respective trades,—fullers have not (though they are said to have such a right in the city of Exeter by ancient usage, Cross, 34:2). A factor has a general lien on the goods in his possession, for the general balance on the whole of the charges he is entitled to in the course of his factorage. If he shall have become security for his principal with his consent, and has been compelled to pay the sum, it is part of the balance on which he has a lien. In this, as in all other cases, the lien may be defeated by the property being deposited with the factor for a specific purpose, for which he is bound to hold it if he take possession of it,—as, specific purpose, for which he is bound to hold it if he take possession of it,—as, where goods were placed in his hands, in consequence of an agreement that they were to be sold for the benefit of a particular creditor (Weymouth v. Boyer, 1 Ves. Jun. 416). A general lien is held by packers, when they are of the nature of factors, and by insurance-brokers. There is a general lien in favour of bankers—on bills deposited with them for a general account, but not on those deposited for a specific purpose, or on deeds casually left in their offices, after a refusal to advance money on them.

Persons in the situation of being entitled to a lien lose it by relinquishing possession of the property from which they derive it. A factor in a foreign country, however, who has purchased goods for his principal on his own credit, is entitled to stop them in transitu after shipment to him; and where the creditor deposits the subject with a third person, apprizing him of the lien, and appointing him to keep possession as his servant, the lien is not parted with. (Montague on Lien. Paley on Principal and Agent, 127-153. Cross on Lien.)

LIGHTER, a small vessel used for carrying goods to or from a ship in lading or unlading. Lighterage is the expenses attendant upon the operation.

LIGHTHOUSE, an edifice constructed near the scacoast, in which lights are exhibited for the guidance of ships. Anciently this purpose was served by fire-

exhibited for the guidance of ships. Anciently this purpose was served by fire-towers, where also sacrifices were offered for the safety of the mariners. The most eelebrated of the ancient lighthouses was the *Phoros* of Alexandria, erected B. C. 283; its height is stated, though probably with much exaggeration, to have been 400 feet; and it was accounted one of the seven wonders of the world. The most re-400 feet; and it was accounted one of the seven wonders of the world. The most remarkable in modern times are, the Tour de Cordouan, erected in 1611, at the entrance of the Gironde in France, the height of which is said to be 186 feet; the Eddystone, a circular tower, constructed (1756-59), on a rock distant 4 leagues S.W. from Plymonth Sound; it sweeps up with a gentle curve to the height of 364 feet; and its utility, beauty, strength, and originality, have shed lustre on the name of the engineer, John Smeaton: and the Bell Rock, erected near the entrance of the Tay in Scotland, on the model of the Eddystone, by Mr Stevenson (1812); its height is 113 feet above low water. Besides lighthouses, there are in many places, especially in the estuaries of rivers, "floating lights" attached to vessels moored in certain positions, to indicate the existence of shoals or sunken rocks.

The lights on our coasts generally consist of argand burners. placed on the foci

The lights on our coasts generally consist of argand burners, placed on the foci of parabolic reflectors made of silver strengthened with copper; the reflectors being arranged, and the lights exhibited in such a manner that those on the same line of arranged, and the lights exhibited in such a manner that those on the same line of coast should have some essential distinction: thus, some of them are revolving or intermittent, many are fixed, others are placed one above another; some flash once every five seconds, and not a few become alternately red and white. The whole are divided into "harbour lights" and "general lights." Many of the latter were formerly private property, but they are now almost all vested in public boards, one of which, called the Trinity House, possesses besides a controlling power over all the marine beacons of the United Kingdom.

The Trinity House of Deutford Stand was incorporated by Harry VIII in

The Trinity House of Deptford Strond was incorporated by Henry VIII. in 1515 for regulating pilots, erecting lighthouses and beacons, and other objects connected with navigation. It possesses an elegant hall in London near the Tower; connected with navigation. It possesses an elegant hall in London near the Tower; and is governed by a master, four wardens, eight assistants, and thirty-one elder brethren, most of them persons of distinction; and there are, besides, numerous inferior members termed younger brethren. The powers of the corporation in regard to lights and other seamarks are at present regulated by an act passed in 1836, 6 & 7 Wm. IV. c. 79. This act invested them for the first time with the supervision of the Scotch and Irish lights; and likewise provided for their purchasing the property of certain others, then in the hands of private parties. The number of English general lights under their immediate management is 74, including 20 floating lights. In 1838, the gross amount of dues levied for lighthouses, vested in them prior to the act of 1836, was £119,190; for those transferred to them under that act, £49,810; and for buoys and beacons, £13,141; total, £182,141; yielding, after paying charges, a surplus of £55,005; of which £32,562, arising from lights held by them before 1836, was applicable to the relief of poor seamen, widows, orphans, and other charitable purposes, and £22,443 to the account for private lights since transferred to them (Par. Paper, 1840, No. 362). The only varies to lighthouses not yet made over to the Tripity House are those of the Sharrier

private lighthouses not yet made over to the Trinity House are those of the Skerries, Spurn Point, and Tynemouth.

In Scotland, the lights are under the management of the "Commissioners for Northern Lights,"—a corporation (38 Geo. III. c. 58) consisting of the Lord Advocate, the Solicitor General, and twenty-three municipal officers. Their services are gratuitous. The number under their charge is 27; and the net amount of dues levied in 1839 was £42,955, applicable, after paying charges, to the erection of new works. They are, besides, vested by the act 6 & 7 Wm. IV. c. 79, with a general charge of the local or harbour lights.

In Ireland, the lights are under the management of the Corporation (52 Geo. III. c. 115), for improving and extending the Port of Dublin, a body consisting of the Lord Mayor and two Sheriffs of Dublin, three Aldermen chosen by the Board of Aldermen, and seventeen other individuals appointed in the first instance by the act of incorporation, but who have the power of filling up the vacancies. The number of public lights possessed by them is 29, besides 16 harbour-lighthouses, including 5 for which no rates are exacted; their gross revenue in 1832 was £42,061. This corporation has likewise a general charge of all the other local lights.

The Scottish and Irish Boards must give six months' notice to the Trinity House

before erecting any new lighthouses, or making any alterations on those already erected: notice of any changes must be likewise given to the public through the Gazette and other newspapers (§ 46). In the event of any difference between the Trinity House and the other Boards, the latter may appeal to the Queen in Council.

We have no recent accounts of the local lights; but, including the 16 Irish har-bour-lights already noticed, the number in the United Kingdom may be taken at 95; making the total of public and local lights on the British and Irish coasts about 225.

about 225.

The rates of duty levied on vessels passing within certain limits vary greatly in respect to different lights: for some of the English ones, only \$\frac{1}{2}\text{d}\$. per ton is charged on British, and \$\frac{1}{2}\text{d}\$. per ton on vessels belonging to foreign powers with whom we have no treaties of reciprocity; while for others, the charges are as high as \$1\text{d}\$. and \$2\text{d}\$. per ton on British and unprivileged foreign ships respectively. In Scotland, the charge on coasting vessels (not wholly in ballast) is \$\frac{1}{2}\text{d}\$, per ton for each time of passing every lighthouse, or deriving benefit thereby, except that on the Bell Rock, for which \$1\text{d}\$. per ton is chargeable; on British vessels on foreign voyages, \$1\text{d}\$ and \$2\text{d}\$, per ton are respectively payable for these lights; unprivileged foreign vessels pay double rates (\$\frac{4}{2}\text{d}\$). In Ireland, the charge is \$\frac{1}{2}\text{d}\$, per ton for each light, except on vessels wholly in ballast and without passengers, which are exempted; double rates are payable for unprivileged foreign vessels. \$\frac{1}{2}\text{LIRUM VIT} \mathcal{E}\$. [Guatacus.]

LIME, the protoxide of calcium, is found abundantly in most countries, in a combined state with other substances, particularly in limestone, chalk, and marble,

combined state with other substances, particularly in limestone, chalk, and marble, which are carbonates of lime. The common method of obtaining it is by the process of burning, in which limestone, mixed with coal or charcoal, is exposed to a strong heat; in this way the carbonic acid is expelled, and the product, called quick-lime, is the substance in a state of purity. It is white, or of a pale gray tint, opaque, inodorous, and its taste is acrid and alkaline. When water is quick-lime, is the substance in a state of purity. It is white, or of a pale gray tint, opaque, inodorous, and its taste is acrid and alkaline. When water is poured upon quick-lime it heats, cracks, swells, and a bulky white powder is obtained, called slaked lime. The limpid, colourless fluid, called lime-water, used as an antacid, is prepared by mixing powdered lime with warm water; and what is termed milk or cream of lime, is merely slaked lime diffused through lime-water. Lime is used in immense quantities in this country as a manure, and as an ingredient in mortar. In several metallurgic processes it is used as a cheap and powerful flux: it is also employed extensively in soap-making, leather-dressing, dyeing, and medicine, besides many other purposes in common life and the arts.

By 36 Geo. III. c. 110, lime and limestone may be shipped and landed coastwise without any customs document whatever.

LIME the fruit of a tree (Citrus limetta) which crows in Spain. Portugal, France.

LIME, the fruit of a tree (Citrus limetta) which grows in Spain, Portugal, France, and East and West Indies. In appearance and natural qualities it resembles the lemon, differing only in being smaller, and nearly round, with a smooth rind, and

in the pulp not having such a sharp and powerful acid, but being, on the contrary, flat and slightly bitter. The flavour of the lime is, however, reckoned superior to that of the lemon. It is used for punch, sherbet, and other liquors.

LIME, on LINDEN, a timber tree (Tita Europea), of which there are several varieties; the most valuable being the "common lime," a large, fast-growing, beautiful tree, reared in most parts of Britain, but thriving best in rich loam, and in warm and rather moist situations. Its wood is soft and weak, but being close grained, delicately white, and of a uniform colour, it is well adapted for all light works that are to be partially painted, and then varnished. Possessing, even in a higher degree than the maple, the property of not warping, it is used for cutting boards, and for the keys of musical instruments; while, from its standing the tool well, it is employed by carvers for most part of their wooden ornaments; whence the lime is called, by way of eminence, "the carver's tree." The bark divided into the narrow slips called bast, is in the N. of Europe extensively plaited into ropes, and worked into the mats in which flax and hemp

The bark divided into the harrow slips called out, is in the N. of Europe extensively plaited into ropes, and worked into the mats in which flax and hemp are imported from the Baltic.

LIMITATION, in the law of England and Ireland, is the expiry of a right through lapse of time. In Scotland, the analogous provision of law is called Prescription. Perhaps the most important operation of limitation is its creation of a scription. Fernaps the most important operation of infliction is its creation of a title to real property, which it does by conferring a positive right on the possessor, and creating a personal exception against other claimants; but it is only as a bar to claims connected with commercial transactions that it can be here considered. Limitation may either be a bar to a substantive claim, or to a particular means of

proving it.

By the statutes of Limitations (English act, 21 Jas. I. c. 16; Irish, 10 Cha. I. Sess. 2, c. 6) "All actions of account and upon the case, other than such accounts as concern the trade of merchandise between merchant and merchant, their factors or servants: all actions of debt grounded upon any lending or contract without or servame: an actions or deep grounded upon any lending or contract without specialty. . . . shall be commenced and sued . . . within six years next after the cause of such actions or suit, and not after." The period of limitation begins to run when the obligation is exigible; and so when credit is stipulated for, its currency commences on the expiry of the credit. It applies to bills and promissory notes, running from the day when they become due. Notes payable on demand are held as exigible from the date of their completion, and the limitation then begins to run. The exception of "such accounts as concern the trade of merchandise" caused considerable discussion as to whether all marchand's accounts and chandise" caused considerable discussion as to whether all merchants' accounts and charges for the price of commodities were intended to be exempt from limitation.

"But it is now settled, that accounts open and current only are within [the exception of] the statute: that therefore, if an account be stated and settled between merchant and merchant, and a sum certain agreed to be due to one of them, if in such case he to whom the money is due does not bring his action within the limited tame, he is barred by the statute" (Sir E. Tomlins. In accounts by tradesmen against their customers, limitation runs on each article, so that the creditor can only recover for those sold within the six years. The currency of the limitation may be stopped and a new period commenced, by such an acknowledgment on the part of the debtor as may suffice to create a new agreement. By the 9th Geo. IV.

only the party making it, and is not pleadable against co-obligants.

LINEN (Du. Lynwaat. Fr. Toile. Ger. Linnen. It. Tela. Por. Panno de linho.

Sp. Tela de lino. Rus. Polotno) is strictly cloth woven from the fibres of the Sp. Tela de kino. Rus. Polotno) is strictly cloth woven from the fibres of the flax plant, though the term is now likewise understood to comprehend all kinds of hempen cloth. This manufacture is of the highest antiquity. It appears to have originated in Egypt where the plant is indigenous, and where the mummies are generally found swathed in linen, some of which is stated by Belzoni to be "quite as fine as our common muslin, very strong, and of an even texture." Little is known regarding the state or progress of the manufacture among other ancient nations, or during the middle ages; and the period of its introduction into this country cannot be ascertained. In 1175, flax and hemp were classed in England among the titheable productions; and for long afterwards the government encouraged their growth for the supply of the home manufacture; but the greater part of our linens was imported from Flanders and the north of Europe until last century, when the trade rose into some importance, particularly in Scotland and Ireland. It is, however, only within late years that our linen manufacture can be said to have become a truly national branch of industry, a distinction which it owes mainly to the reduction of the duties on foreign flax and hemp, and the adaptation and application of the inventions of Hargreaves and Arkwright to the spinning of

application of the inventions of Hargreaves and Arkwright to the spinning of yarn by means of machinery.

In Scotland, at the period of the Union, the linen manufacture, though then styled "the great national staple," was very trifling, and almost wholly domestic. But a board having been appointed (1727) for its encouragement by means of premiums, and bounties granted on the cloth exported, the trade was in course of time greatly extended, so that in 1800 the quantity stamped for sale by the officers of the board was 24,235,633 yards, valued at £1,047,598, which was exclusive of that wovenfor domestic use. The operation of spinning,—hitherto altogether performed by women in their own dwellings,—was now in part executed by means of flax mills; and in 1814, some of the mill-spinners became also manufacturers. The subsequent progress of the trade, especially after the reduction of the import-duty on flax in 1825, has been most remarkable. This has been more particularly the case at Dundee, now the chief emporium of the linen-trade of the United Kingdom. In 1814, the quantity of flax imported into that place did not exceed 3000 tons, but in 1841 it amounted to 25,865 tons, besides 4181 tons of hemp, the value of the whole being £905,086; tity of flax imported into that place did not exceed 3000 tons, but in 1841 it amounted to 25,865 tons, besides 4181 tons of hemp, the value of the whole being £905,086; while the population of the town increased in the same interval from about 30,000 to 63,825. The manufactures of Dundee are chiefly of the coarser kinds; but of late years the spinning of fine yarns has been introduced, a part of which is woven in the place, and the remainder exported. The shipments from this port in the year ending May 1841 amounted to 697,295 pieces cloth, of the value of £1,322,835; and 122,064 cwis. yarn, amounting to £488,256; the former comprising 208,415 pieces sheeting; 137,934 pieces salcloth; 170,581 pieces sanding and bagging; 79,564 pieces dowlas; 72,313 pieces osnaburgs; and 28,588 pieces sundries. The number of spinning-mills in Forfarshire was stated in 1835 to be nearly 100, of which 41 pressessing 1695 horses nower were givented within the town of Dundes which 41, possessing 1695 horse-power, were situated within the town of Dundee. The weavers often work in their own houses, but sometimes in factories,—the master in the latter case furnishing the loom, which is generally the common one with the fly-shuttle. Of late the power-loom has been successfully applied to the weaving of dowlas, sheeting, and other fabries. Besides Dundee and the adjacent district, the linen-trade is proscotted extensively in Aberdeen, where there are some very large flax-mills; and in Fifeshire, particularly at Dunfermline, a thriving town which has been long celebrated for the manufacture of damaeks, table-linen, diaper, and fine shirting.

In Ireland, the linen manufacture first owed its extension to the jealousy of the English, on account of the progress which that country was making in the woollen manufacture, in the reign of William III., and who, at their instigation, introduced a series of laws which had the effect of crushing the latter, and introducing the a series of laws which had the effect of crushing the latter, and introducing the former in its stead. A board was afterwards appointed for its superintendence; bounties also were granted on exportation; and, what was of more importance, the consumption of England, as regarded the finer qualities, was virtually secured to the Iriah manufacturers by the prohibitory duties imposed on foreign linens. The trade in consequence progressively increased. In 1800, no fewer than 31,978,039 yards were imported from Ireland into Britain, besides 2,585,629 yards shipped to other countries; in 1825, the exports were, to Britain, 52,559,678 yards, to other countries; in 1825, the exports were, to Britain, 52,559,678 yards, to other countries, 2,553,587 yards. Since 1825, no account has been taken at the custom-house of the commercial intercourse between the two islands, which was then placed on the footing of a coasting-trade; but according to a report of the railway commissioners, the shipments from Ireland in 1835 amounted to 70,209,572 yards, of the value of £3,730,854. The province of Ulster is that wherein the manufacture is chiefly prosecuted, its principal seat being Belfast; and the cloths woven are mostly of the finer kinds. Spinning machinery was introduced in 1806 or 1808; and in 1839, the number of flax-mills in Belfast was 20, employing 7000 hands. A great proportion of the yarn worked up, however, is sent from England.

and in 1839, the number of flax-mills in Belfast was 20, employing 7000 hands. A great proportion of the yarn worked up, however, is sent from England. In England, various branches of the linen trade are carried on in Lancashire and the West Riding of Yorkshire, as well as in Dorset, Durham, and Somerset; but that part of the United Kingdom is now chiefly distinguished for the spinning of yarn, a branch which has of late risen into high importance, particularly at Leeds, where some of the flax-mills are of the most magnificent description. In 1839, the number was 44; comprising a horse-power of 1259. Of the yarn produced a portion is worked up in the town and adjoining district, but the greater part is sent to other places, especially Iroland and France. sent to other places, especially Ireland and France

We possess no very recent account of the extent of that part of the manufacture which is carried on in factories. According to returns made by the inspectors in 1835, the number of factories then at work was, in England, 152; in Scotland, 170;

in Ireland, 25; in all, 347: and the number of males employed therein was 10,395, and of females, 22,888; total, 33,283, about one-half of whom were young persons under 18 years of age.

A spindle of linen yarn contains 14,400 yards: it is divided into 24 heers, 48 leas or cuts, or 11,520 threads; each thread being thus 90 inches: the bundle of yarn is 4½ spindles, or 60,000 yards. The quality of yarn is expressed in England by figures denoting the number of leas or cuts (each of 300 yards) contained in a pound weight; in Scotland by the number of pounds in a spindle, or 48 leas. Thus, No. 48 yarn in England is called 1 lb. yarn in Scotland. The range of the qualities is considerable, but it is seldom spun of greater fineness than No. 200, the quality fitted for good cambric, though at Leeds it is now produced up to 240.

The improvements introduced into the spinning processes have been such, that

fitted for good cambric, though at Leeds it is now produced up to 240.

The improvements introduced into the spinning processes have been such, that while the length of a pound of yarn of average fineness was in 1813 and 1814 only 3830 yards; in 1883, the same weight of average yarn contained 11,170 yards (Porter's Progress of the Nation, vol. i. p. 269); and, since the year last mentioned, the average quality has been carried even to a much higher point, the cost of the manufacture being at the same time greatly economized. This perfection of our spinning machinery has not only rendered us entirely independent of Flanders and other parts of the Continent for the supply of yarn, of which, so lately as 1827, nearly 4,000,000 lbs. were imported for the use of our weavers, but it has opened up the entirely new trade of exporting yarn, and has been, besides, as already noticed, mainly the cause of that cheapness of our linens, which, notwithstanding the entire abolition of the bounty system, has enabled us successfully to compete with other countries, formerly our superiors, in the general markets of the world. The following table shows the progress of our exports since 1820, in so far as we are enabled to furnish details; distinguishing the shipments to the United States and France+ respectively, our principal customers for cloths and yarns:—

		Linen M	anufacture	Linen Yarn Exported.					
Years.	Entered by	the Yard.	Small	Total	Exports to	Quantity.	TotalValue.	Exports to	
	Quantity.	Value.	Wares.	Value.	Unit. States.	Quantity.	TOTAL VALUE	France.	
	Yards.	£	£	£	£	Lba.	£	£	
1890	38,077,898			·		• • • •		• • • • •	
1825	52,080,185				_	••••			
1826	39,986,715					• • • •	• • • •	• • • •	
1897	55,132,189		71,032	2,128,383		••••			
1828	60,287,814			2,186,422			• • • • •		
1829	57,698,372			2,005,644	653,296		• • • • •		
1830	61,919,963			2,066,424	795,513	••••		1	
1831	69,233,892			2,461,704	1,021,696	::::	*:::	1	
1832	49,531,057			1,774,727	414,160	110,188	8,705	6,516	
1833	63,232,509			2,167,024	830,820	935,689	72,006	68,299	
1834	67,834,305		85,355	2,443,346		1,633,325	136,312	130,561	
1835	77,977,089	2,893,139		2,992,143		2,611,215	216,635	198,823	
	82,088,760	3,238,031	88,294	3,396,325		4,574,504	318,779	276,942	
1837	58,426,333	2,063,425		2,127,445	584,597	8,373,100	479,307	401,007	
	77,195,894			2,820,272	941,281	14,923,329	746,163	600,806	
1839	85,256,542			3,414,967		16,314,615	818,485	644,144	
1840	89,373,431	3,194,827	111,961	3,306,088	975,586	17,733,575	822,876	629,533	
1841	ı —			3,356,030			970,840		

Besides the United States (whose demand, it will be observed, is subject to striking fluctuations) linens are largely exported to British America, the W. Indies, S. America, especially Brazil, and to France, Spain, and Gibraltar: they also enter pretty largely into our trade with Italy, Portugal, the East Indies, and Australia; and small quantities are sent to Germany, Africa, and other parts. The only other countries, besides France, to which yarn is sent to any amount, are Germany, Holland, Belgium, and Italy, though to a small extent in the last case. No foreign linens are entered for consumption in this country, except certain fine qualities of cambric, including pocket handkerchiefs, which are still imported from France.

Some plain cloths are besides brought, though not to any great extent, from Russia and Germany, for re-exportation to the W. Indies, United States, and S. America.

We possess no data for calculating the present value of the linen manufacture of the United Kingdom, but do not believe we shall err greatly in estimating its

^{*}The bounties ranged from \$\frac{1}{2}\text{d}\$, a-yard, according to quality and value; and the amount generally paid was from £300,000 to £400,000. Their abolition, which was gradual, began in 1825, and the payments cessed on 5th January 1832. [BOUNTY.]

† A considerable addition was made to the French duties on linens and yarns by ordonnance, June 26, 1842, which, unless retracted or modified, will materially influence our future cyports.

annual amount at from £9,000,000 to £9,500,000, or nearly one-fourth that of the

annual amount at from £9,000,000 to £9,500,000, or nearly one-fourth that of the cotton manufacture. [Flax. Hem.] \$\frac{1}{2}\$ LING, a valuable species of cod (Lota molva, Cuv.), having a slender body, usually from \$5 to \$4\$ feet in length. Large quantities are caught among the Hebrides, in the Orkneys, and on the Yorkshire coast; in Cornwall and the Soilly Isles; also on the Irish coast. In Zetland, the principal fishing is from May to August; whereas in Cornwall, they are caught in January and February. Besides a portion that is consumed fresh, the fish are split from head to tail, cleaned, salted in brine, washed, and dried: but the demand generally falls short of the quantity cured. The ports of Spain are the foreign markets chiefly supplied. The air-bladders, or sounds, are prepared separately, and with those of the cod-fish are sold pickled.

LINSEED (Da. Horrfroe. Du. Lansaad. Fr. Graine de lin. Ger. Leineaut. It. Lineaue. Rus. Semja lenjance), the produce of the flax-plant, consists of small, bright, grayish-brown, slippery, elongated bodies, containing a mealy oleaginous albumen, which yields, by expression, oil in such great abundance that the seed forms for this purpose, as well as for reproduction, an important article of trade. Lineaud is preferred when bright and heavy, and especially that which, when bruised, appears of a light or yellowish green colour, fresh and oily. It is produced only in small quantities in the United Kingdom; but nearly \$,000,000 bushels are now annually imported; three-fourths of which come from Russia: the remainder is chiefly from Prussia, Italy, and India; but small parcels are likewise brought from N. America, Holland, Sweden, Denmark, Turkey, and Egypt. About one-fifth of the importations is used in Ireland for sowing, for which purpose the bout one-fifth of the importations is used in Ireland for sowing, for which purpose the bout of 800,000 to 700,000 Imperial quarters. The principal ports of shipment are Riga and St. Petersburg. The chief general distinctions of l

LINSEED-OIL is what is called a drying oil. Cold-drawn, it is greenish-yellow, and more viscid than when hot-drawn. Sp. gr. '934. It is one of the cheapest fixed oils; and is used in the manufacture of paints, varnishes, and printing ink.

LINSEED-OIL CAKE, the substance which remains after the oil is expressed, contains the albuminous and mucilaginous part of the seed, and is used for fattening

cattle

cattle.

LINSEY, or LINSEY WOOLSEY, a kind of flannel, of which, however, only the woof is composed of wool, the warp being thread.

LIQUORICE ROOTS (Fr. Bois de reglisse. Ger. Susshols. It. Legorisia), the roots of a perennial plant (Glycyrhisa glabra), a native of the south of Europe, but cultivated in England, particularly at Pontefract, in Yorkshire. They are very long, about an inch thick, flexible, fibrous; of a brown colour, and when fresh, pitcy; taste sweet, and slightly bitter. They are extremely apt to spoil, and it is necessary to preserve them in sand, or in some very dry place. Liquorice roots are an article of the materia medica, and are also in demand by brewers and druggists. They are used both in the form of extract and of powder.

LIQUORICE JUICE (It. Sugo di regolisia. Sp. Regalis en bollos o' pastillas), called also Spanish juice, black sugar, or succus liquoritie, is the inspissated juice of the fresh roots just specified; and is imported from Sicily, Italy, and Spain, in cylindrical rolls, covered with bay leaves. It should be quite black, brittle when cold, and break with a smooth glossy fracture, have a sweet taste without empy-

cold, and break with a smooth glossy fracture, have a sweet taste without empyreums, and be almost entirely soluble in water. It is used in medicine, particularly in tickling coughs. The Italian is the best; that from Spain is scarcely marketable. About 8000 cwts. are annually imported, almost wholly from Sicily and Italy. Little or no liquorice juice is made in this country, except in Yorkshire, where an extract is prepared under the name of Pontefract cakes.

LIS 451 LIT

Refined Liquorice, or rather what is commonly called so, is generally prepared in this country by compounding inferior juice with glue or mucilage. It is in small cylindrical pieces, not thicker than a goose-quill.

LISBON. [PORTUGAL.]

LISBON german weight, generally equal to about 14 lbs.

LITERARY PROPERTY may be defined as the produce of intellectual exertion, published to the world, but in such terms and under such conditions that the right of publication and the benefits derivable therefrom are matter of property. The peculiarity of this species of property consists in its untangible nature, which leaves no room for applying to it the ordinary criteria of possession or occupancy, by which physical property is ascertained; and a peculiar code has thus been rendered necessary for its regulation. A manuscript or a painting, while the former is

right of publication and the benefits derivable therefrom are matter of property. The peculiarity of this species of property consists in its untangible nature, which leaves no room for applying to it the ordinary criteris of possession or occupancy, by which physical property is ascertained; and a peculiar code has thus been rendered necessary for its regulation. A manuscript or a painting, while the former is not printed or the latter engraved, are each riewed as pieces of physical property, subject to the ordinary rules of possession. It is when copies come to be multiplied for publication that literary property is constituted and brough into existence.

The law of copyright is now embodied in 5 & 6 Vict. c. 45. As to all works published after the date of the act (1st July 1842), it extends to the lifetime of the author, and to 7 years after his desth; but if these 7 years should expire within 42 years from the direct publication, the copyright is to exist till the termination of 42 years from the direct publishing. The copyright of a book published after the author's death, and after let July 1842, is to exist 42 years, in the person of the proprietor of the MS. (§ 6). The same period of copyright is extended to the authors of books published before lat July 1842, and to their representatives; but publishers who have acquired the copyright, consent to accept the benefits of the act, and enter a minute to that effect in the register at Stationers' Hall, when the remaining copyright while the property of such person or persons as in such minute shall be expressed? (§ 4). Where the holder of a copyright after the author's death refuses to give the world the benefit of the work, the judicial committee of the privy council may greant a license to publish it, on its being shown to be advantageous to the public (§ 5).

Entry at Stationers' Hall.—Proprietors of the copyright of books to be published may enter in the register may be consulted by any one, on payment of 1s. is payable to the company's officer (§ 6). A

ing of this act, have projected, conducted, and carried en, or shall hereafter project, conduct, and carry on, or be the proprietor of any encyclopædia, review, magazine, periodical work, or work published in a series of books or parts, or any book whatsoever, and shall have employed or shall employ any persons to compose the same, or any volumes, parts, essays, articles, or portions thereof, for publication in or as part of the same, and such work, volumes, parts, essays, articles, or portions shall have been or shall hereafter be composed under such employment, on the terms that the copyright therein shall belong to such proprietor, projector, publisher, or conductor, and paid for by such proprietor, projector, publisher, or conductor, the copyright in every such encyclopædia, review, magazine, periodical work, and work published in a series of books or parts, and in every volume, part, essay, article, and portion so composed and paid for, shall be the property of such proprietor, projector, publisher, or other conductor, who shall enjoy the same rights as if he were the actual author thereof, and shall have such term of copyright therein as is given to the authors of books by this act; except only that, in the case of essays, articles, or portions forming part of and first published in reviews, magazines, or other periodical works of a like nature, after the term of 22 years from the first publication thereof respectively, the right of publishing the same in a sethe first publication thereof respectively, the right of publishing the same in a se-parate form shall revert to the author for the remainder of the term given by this parate form shall revert to the author for the remainder of the term given by this act; provided always, that during the term of 28 years the said proprietor, projector, publisher, or conductor shall not publish any such essay, article, or portion separately or singly without the consent previously obtained of the author thereof, or his assigns: provided also, that nothing herein contained shall alter or affect the right of any person who shall have been or who shall be so employed as aforesaid to publish any such his composition in a separate form, who by any contract, express or implied, may have reserved or may hereafter reserve to himself such right; but every author reserving, retaining, or having such right, shall be entitled to the copyright in such composition when published in a separate form, according to this act, without prejudice to the right of such proprietor, projector, publisher, or conductor as aforesaid. The entry of such works in series may be made at Stationers' Hall, at the commencement of the issue, once for all" (§ 11). Copyright is declared by the act to be personal property (§ 25).

made at Stationers' Hall, at the commencement of the issue, once for all" (§ 11).

Copyright is declared by the act to be personal property (§ 25).

Remedies against Piracy.—The remedy is by an ordinary action of damages, against any party publishing or selling without license a work belonging to another, or importing copies of it from abroad (§ 15). Where a person pursued for piracy intends to question the pursuer's title, he must send specific notice before trial, stating the facts as to composition and proprietorship, on which he founds (§ 16).

All actions must be commenced within twelve months after the cause of action has arises (§ 28). Piracted contents of healts become the property of the awares of the

All actions must be commenced within twelve menths after the cause of action has arisen (§ 26). Pirated copies of books become the property of the ewner of the copyright (§ 23). Any person accessory to importing for sale or hire copies of books in which there is copyright, on conviction before two justices of peace, forfeits for each offence £10, and double the value of the copies imported. Officers of customs and excise are authorized to seize such illegally imported copies; and, on the recovery of the penalty, £5 goes to the officer seizing,—the remainder to the proprietor of the copyright (§ 17).

It is sometimes very difficult to determine whether a copyright has been infringed, and how far. In the case of books of reference, especially those belonging to the exact sciences,—in read-books, calculation-tables, and almanacs, it will often happen that parties cannot go over the same ground without producing the same result, so that identity is not in every case (as in ordinary literary works) proof of plagiarism. The difficulty, however, is greatly overcome by keeping in view the principle at the foundation of literary property,—that no man is entitled to make use of the labours of his neighbours for his own behoof. The chief difficulty in such case rests in the evidence of adaptation, and this must often be incidental, make use of the labours of his neighbours for his own behoof. The chief difficulty in such case rests in the evidence of adaptation, and this must often be incidental,—it will arise from peculiarities in order and method which the plagiarist has been found to have mechanically employed without knowing their application; from the use of exclusive information, to which the plagiarist had no access; and it may even arise in the adoption of the typographical errors of the original. The most clear evidence generally obtainable, is the distribution of part of the original work in the printing-office as "copy" to the compositors.

International Copyright.—By a late act, copyright may be secured in works first published abroad, if the publication have been in a country which grants a reciprocal privilege to books first published in the United Kingdom (1 & 2 Vict. c. 59). The privilege is proclaimed by order in council. It cannot exceed the amount of copyright privilege which the acts allow to the publications of this country (§ 1), but

copyright privilege which the acts allow to the publications of this country (§ 1), but

it may be for any shorter period that the order in council may direct (§ 7). The title of the book, name and place of the author, and time and place of first publication abroad, must be entered at Stationers' Hall, and a copy must be deposited in the British Museum within a time specified in the order (§ 1). No copyright in a work first published abroad can be enjoyed in the United Kingdom, except in terms of the act, which includes music, maps, charts, agt plans (§§ 13, 16).

In Dramatic Compositions there is now, by 3 d. Wm. IV. c. 15, a copyright as against performance on the stage. It extends absolutely to all pieces not printed and published at any time not more than ten years before the date of the act (10th June 1833), in both cases for twenty-eight years from the date of publication, and thence during the author's life. By 5 & 6 Vict. c. 45, above mentioned, the period extended by the act to other literary property is extended to dramatic representations: and it is provided that an assignment for publication of a dramatic piece is not to convey the right to represent it (§§ 20, 21). The penalty for infringement of this species of copyright is 40s., or damages to the extent of the sum cleared by the representation, and double costs.

In Musical Compositions there is a copyright which, by §§ 20 & 21 of 5 & 6

In Musical Compositions there is a copyright which, by §§ 20 & 21 of 5 & 6 Vict., is made precisely the same as that in dramatic compositions.

Lectures.—Another late statute (5 & 6 Wm. IV. c. 65) constitutes a copyright

Lectures.—Another late statute (5 & 6 Wm. IV. c. 65) constitutes a copyright in lectures delivered, which are not to be published without the lecturer's consent, either by persons who have obtained liberty to attend them, through the payment of fees, or by any other unanthorized person. The privilege extends by the statute to the usual period of copyright, which, at the time the act was passed, was 28 years. There is no mention of this species of copyright in 5 & 6 Vict.

LITHARGE (Fr. Litharge. Ger. Glätte), a semi-vitrified oxide of lead, in the form of small shining heavy scales, or more or less agglutinated masses. It is usually produced in the purification of silver from lead, and the refining of gold and silver by means of this metal. According to the degree of fire and state of oxidation, it has a pale or a deep colour,—the one is called litharge of silver, and the other litharge of gold. Litharge is employed in medicine, and by potters, glassmakers, painters, and others. About 500 tons are annually exported, chiefly to Germany and Russia.

makers, painters, and others. About 500 tons are annually exported, chiefly to Germany and Russia.

LITMUS (Fr. Tournesol. Ger. Lackmus), a violet-blue dye, prepared chiefly in Hollands from a lichen (Lecomora tartarea), which grows in the Canary and Cape de Verde Islands. It is imported in small cubical cakes, of a dusky blue colour, light, and easily pulverized. It is employed to stain marble; also as a chemical test of acidity, being reddened by acids, while the blue is restored by alkalis; for this purpose it is employed either in the form of a tiucture, or of unsized paper coloured with it.

LITRE, a French measure of capacity equal 1½ Imp. pint nearly.

LIVRE, the integer of account in the old system of France, is equivalent to 9½d. nearly; and 81 livres = 80 francs. Livre is also the French name for a pound weight. The livre usuel = 1 lb. l oz. 10½ drams avoird.

LLOYD'S, the name of a subscription coffeehouse in London, celebrated on

LLOYD'S, the name of a subscription coffeehouse in London, celebrated on account of its being the office of the Society of Underwriters. [INSURANCE, MARINE] It is situated in a gallery of the Royal Exchange, Cornhill, and its rooms are private to the subscribers. Few or none of the commercial institutions of Britain have excited in a higher degree the admiration of intelligent foreigners. "The establishment of insurances at Lloyd's," says Baron Dupin, "has rendered signal services both to the commerce of the British empire and to that of other states. The society has agents in most of the principal ports of all parts of the world; it makes public the events, both commercial and maritime, which it learns through their means: these accounts are received by the public with a confidence which nothing for more than a century has tended to destroy." "At Lloyd's," says Von Raumer," "close to the dial which tells the hour, is one still more interesting here, which tells the direction of the wind, and is connected with the weathercock on the roof. Intelligence of the arrivals and departures of ships,—of the existence and fate of vessels in all parts of the world,—reports from consuls and commissioners resident in every foreign town,—newspapers and gazettes from every country, are here to be found, arranged in such perfect and convenient order, that the entire actual state of the commercial world may be seen in a few minutes, and any of the countless threads that converge to this centre may be followed out with more or less minuteness. The whole earth, or the whole are characteristics continue preserved in the new edifics. account of its being the office of the Society of Underwriters. eral characteristics continue preserved in the new edifice.

commercial machinery of the earth, appeared to me to be placed in the hands of the directors of Lloyd's coffeehouse.

In order to become a subscriber to this institution, the candidate must be proposed by six members, and afterwards accepted by the managing committee. The rooms are open for the transaction of insurance business from 10 a. m. to 5 p. m.

LLOYD'S REGISTION BRITISH AND FOREIGN SHIPPING.

LLOYD'S REGISTATE BRITISH AND FOREIGN SHIPPING.

For many years a committee of gentlemen connected with Lloyd's has superintended a registry of the qualifications of ships; which, upon the reports made of them by surveyors, are ranked in different classes, and a preference given as to employment and insurance, according to the place assigned to them. Until 1834, the age of the ship was held to be conclusive evidence as to her deterioration, without reference to original quality or repairs; but this regulation having led to the building of ships with little regard to durability, and to the application of repairs as sparingly as possible, the system of classification was in that year thoroughly reformed. Ships are now classed according to their real and intrinsic qualities at the time of survey; and thus every inducement is presented to build them in a substantial manner, and to give them thorough repairs as often as needed. The rules for the guidance of owners are stated in detail in the Register Book. The principal are the following: principal are the following :-

principal are the following:—

First Class Shirs.—First Description comprises all which have not passed a prescribed age, provided they are kept in a state of complete repair and efficiency; and they are designated by the letter A (§ 33).

The period of continuance in this class varies from four to twelve years, according to the original construction and quality of the vessel, the materials employed, and the mode of building; but after the expiration of the prescribed period, ships are permitted to remain in this rank, or to be restored thereto for a further limited period, on the conditions after mentioned.

If, on the termination of the period of original designation, a shipowner should wish to have his ship remains on the letter A, he is to send a written notice thereof to the committee, who then direct a special survey to be held; and if, from the report of such special survey, the ship shall appear to be in all respects in a sound and efficient state, and to have preserved the original form unaltered, the committee will continue such ship on the letter A for such further period as they may think fit,—not exceeding, however, one-third of the number of years which had been originally assigned (§ 54).

If, at any time before the expiration of two-thirds of the number of years, beyond the period for which ships may have been originally assigned to remain in the First Description of the First

ally assigned (§ 54).

If, at any time before the expiration of two-thirds of the number of years, beyond the period for which ships may have been originally assigned to remain in the First Description of the First Class, an owner be desirous to have his ship restored to that description, such restoration (after survey and repairs) will be granted for a period not exceeding two-thirds of the time originally assigned for the remaining therein; the same to be calculated from the date of surveyars and repairs (§ 55).

If, at any age of a vessel, an owner be desirous to have the ship restored to the First Description of the First Class, such restoration (after survey and repairs) will be granted for so long a period as may be deemed expedient by the committee, not exceeding in any case the term of six years (§ 57).

On the same reinciple of since committee, not exceeding in any case the term of six

tion of the First Class, such restoration (arter survey and repairs) will be grassed by a long period as may be deemed expedient by the committee, not exceeding in any case the term of six years (§ 57).

On the same principle of giving every proper advantage to ships which shall be actually proved to be superior of their class, and in excellent condition, ships which have been restored to the class A shall be entitled to an extension of the time; but the term of such extended continuance shall be limited to a period not exceeding one-third of the number of years for which the ships may respectively have been restored, without any reference whatever to the period originally assigned to them (§ 56).

Second Description comprises all ships which, having passed the prescribed age, but have not undergone the repairs which would entitle them to be continued in or restored to the First Description, or having been continued or restored, and the additional period thus assigned having expired,—appear on survey to be still in a condition for the safe conveyance of the class as are found on survey to be of superior description, being fit for the conveyance of the class as are found on survey to be of superior description, being fit for the conveyance of the class as are found on survey to be of superior description, being fit for the conveyance of the class as are found on survey to be of superior description. The first Class, such ship having been during that time in some port in the Second Description of the First Class, such ship having been during that time in some port in the United Kingdom, the character will be omitted until such survey be held; or, as the case may be, she will be allowed to pass into the class E (§ 61).

British North American built ships, and ships built in India, are subject to special rules of classification (§§ 62, 63, 70).

British North American puns snips, and snips puns in many an arrange classification (§§ 62, 63, 70).

SECOND CLASS SHIPS comprise all found on survey unfit for carrying dry cargoes, but perfectly fit for the conveyance to and from all parts of the world of cargoes not in their nature subject to sea-damage, and they are designated by the letter E. Subject to cocasional impection, ships are continued in this class so long as their condition shall, in the opinion of the committee, entitle

are continued in this class so long as their condition shall, in the opinion of the committee, entitle them thereto (§§ 64, 65).

THIRD CLASS SHIPS comprise those in good condition, and found on survey fit for the conveyance on short voyages (not out of Europe) of cargoes in their nature not subject to sea-damage; and they are designated by the letter I (§ 66).

STRAM SHIPS require to be surveyed twice in each year, when a character is assigned to them according to the report of survey as regards the classification of the hull and materials of the vessel. That, with respect to the boilers and machinery, the letters "M C" are inserted in the Registry Book, when at those periods the owners have delivered to the surveyors the certificate of a compotent master-engineer that they are in good order (§§ 78, 79).

The sloves of all classes of vessels are designated by the figures I and 2,—I signifying that the vessel is well and sufficiently found, 2 that she is deficient in either quantity or quality. Thus, "12 A 1" denotes a twelve-years ship of the first description of the first class, with stores well and sufficiently found.

arm sumctently found.

The case of damages to ships is subject to special regulations; but the class of a ship is never reduced before communicating in writing with the owner, master, or agent (§ 21-25).

The office of Lloyd's Register Society is 2 White Lion Coast, Cornhill, London. The subscription is £3, 3s. per annum, for which a Register Book and Explements are delivered annually. In the book for the year 1841-43, there were of class A, 500 min; Æ, 3568; E, 890; I, 84; no character assigned, 1856; in all, 12,339.

LOADSTONE. [MAGNET.]

LOAN FUND SOCIETIES, benevolent associations for accommodating the industrious poor with small loans. Societies of this kind have been long common in the sister island; and Mr Inglis, in his "Ireland in 1834," testifies to their utility. Since that year they have, under the protection and regulation of a new statute, and a "Central Loan Fund Board" established in Dublin, been greatly increased. In the beginning of 1841, the number enrolled under this Board was 243, which was exclusive of numerous societies in connexion with a London association termed the "Irish Reproductive Loan Institution." Of these 243 societies, 215 had made was excusive of numerous societies in connexion with a London association termed the "Irish Reproductive Loan Institution." Of these 243 societies, 215 had made returns to the board, showing that in 1840 the amount circulated by them was no less than £1,164,046; the number of borrowers, 465,750; the profit, after paying interest to depositors and expenses of management, £15,838; deducting from which the loss of 17 societies, £361, left of net profit, £15,477. A few of these societies partake of the nature of Monts de Piété, but in general they are petty banks, receiving on deposit the small savings of one class, and lending them out to another in loans; each individual borrower giving two joint-securities. Sometimes funds are raised by deposits from the gentry, free of interest, but more commonly on debentures bearing 5 or 6 per cent. The managing committee is formed of the resident clergy and others, who act grautiously; and the net profit is appropriated towards a dispensary, school, clothing and fuel for the poor, or supplying indigent farmers with seed at prime cost. The general tendency of these associations appears to be to engender and foster habits of industry, sobriety, and punctuality; "and the board are of opinion that the prosperity of the system is in no small degree attributable to the societies being upheld by their own resources and exertions." For a fuller account of the working of the system, we must refer to the annual reports of the board presented to Parliament.

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For a fuller account of the working of the system, we must refer to the annual reports of the board presented to Parliament.

In England, these societies are mostly confined to the metropolitan district; and the accounts laid before Parliament in 1841 by Mr Pratt, the barrister appointed to certify the rules of savings banks, show their number on 31st December 1840 to have been only 45; the amount circulated in the previous year, £67,711; and the number of borrowers, 11,438. Neither the English nor the Irish accounts show the proportional amount of the loans repaid by the securities.

The Irish societies are regulated by the act 6 & 7 Wm IV. c. 55, as amended by 1 & 2 Vict. c. 78. These acts provide for the establishment of a Central Board in Dublin; the revision of the societies' rules by a barrister; the limitation of loans to £10 at one time, and the interest to 6d. a-pound for 20 weeks; the appointment of officers, managers, and trustees; the exemption of documents from stamp-duty; the recovery of the loans before justices; and a variety of other rules as to their economy, safety, and good order. In England, the regulating statute is 3 & 4 Vict. c. 110, which contains provisions somewhat similar; allowing, however, a loan of £15 to one individual, and limiting the interest to 5 per cent.

The loan society system is not practised in Scotland.

LOBSTER, a long-tailed crustaceous animal (Astacus marinus) found in abundance on the rocky ceasts of Britain and other parts of Europe, particularly Norway, from whence large quantities are brought to London: the number annually sold at Billingsgate is nearly 2,000,000. They are caught by traps or pots made of twigs, baited with garbage; also by baited nets; and in some countries by torch-light, with the aid of a kind of wooden forceps. In summer, when they deposit their eggs, they are found near the shore; in winter they are seldom taken in less than 12 or 15 fathoms. A sizeable animal is from 1 to 2 lbs. in weight.

No lobsters must be taken on the coast of Soctland

No lobsters must be taken on the coast of Scotland between 1st June and 1st September, under a penalty of £5 for each offence; 9 Geo. II. c. 33, § 4. Fresh lobsters, however taken or imported, may be landed in the United Kingdom without report, entry, or warrant; 3 & 4 Wm. IV. c. 52, § 2.

LOCKS (Fr. Serrures. Ger. Schlösser. It. Serrature. Por. Fechaduras. Rus. Samki. Sp. Cerraduras) are in this country principally manufactured at Wolver-hampton in Staffordshire; but a large share of the trade is likewise possessed by

Birmingham and London, where those of the finest quality are made. [Inon

MANUFACTURES.]

Manufactures.]

LOG, the apparatus used for measuring the velocity of a ship's motion, consists of the log-ship and line stached to it. The former, a small thin wooden quadrant, having the circular edge loaded with lead to make it stand upright, keeps its place in the water when thrown out, while the line is unwound from a reel in the ship's gallery; and the length unwould in a certain time gives the rate of saling. This is calculated by knots made on the line, the length between which, usually 40 or 50 feet, is so proportioned to the time measured by a sand-glass, that the number unwound shows the number of miles which the ship is salling in the hour. The log-book—the ship's journal—contains an account of the progress made as deduced from observations of the log. It is posted daily from the log-board, where these are first recorded. It also contains the state of the weather, direction of currents, position of rocks or shoals, seeing or speaking other vessels, and, in short, all matters relating to the ship's place, not only for present convenience, but as matter of intelligence, or of evidence in case of future inquiry. The course and distance run, computed from the log-book, termed by seamen dead-reckoning, furnishes an approximative estimate of the ship's position, which is necessarily used until an opportunity is afforded of taking observations of longitude and latitude, or of approaching land. Men-of-war steamers keep two log-books,—the ordinary ship's log, and an account of the engine.

or of approaching land. Men-of-war steamers keep two log-books,—the ordinary ship's log, and an account of the engine.

LOGWOOD (Fr. Bois de Campèche. Ger. Blauhols. It. Campeggie. Sp. Pálo de Campeche), a dyewood obtained from the Hamaloxylon Campechianum, a tree which grows in Campeachy and Jamaica, especially the former, from whence the finest wood is procured. It is hard, heavy, of a deep orange colour, a sweetish astringent taste, and peculiar odour; and is brought to us in large blocks or billets which are afterwards reduced to chim.

nnest wood is produced. It is hard, heavy, or a deep orange count, a special sattingent taste, and peculiar odour; and is brought to us in large blocks or billets, which are afterwards reduced to chips. Logwood is extensively employed for compound colours, but its chief use is for blacks, and certain shades of gray: an extract from it is also used in medicine. From 25,000 to 30,000 tons are annually imported,—nearly one-fourth of which, however, is re-exported to Russia, Prussia, and other parts of northern Europe.

LOMBARD, a bank for lending money on pawn.

LOSS. [Insurance, Marine]

LOTTERIES, PUBLIC or STATE. The first English lottery on record was in 1569, for the benefit of the harbours and other works. Licenses for various schemes were afterwards occasionally granted; and in 1634, state-lotteries were introduced in aid of the finances. The principle upon which the public lotteries were conducted was that of selling a certain number of chances or tickets, and distributing by lot a part only of the money collected among a small number of the ticket-holders. The immorality of the government in thus encouraging a spirit of gambling among the people, and misleading them from those habits of continued industry essential to the prosperity of a commercial nation, soon became apparent, and in course of time was forced upon the attention of Parliament. In 1808, a Committee of the House of Commons reported, "that by the effects of the lottery, even under its present restrictions, idleness, dissipation, and poverty are increased,—the most sacred and confidential trusts are betrayed,—domestic comfort is destroyed,—madness often created,—orimes subjecting the perpetrators of them to stroyed,—madness often created,—crimes subjecting the perpetrators of them to the punishment of death are committed,—and even suicide itself is produced, as will fully appear by the evidence submitted to the House."—"No mode of raising money fully appear by the evidence submitted to the House."—" No mode of raising money appears to your Committee so burdensome, so pernicious, and so unproductive." Notwithstanding this just denunciation, government persisted in raising about a quarter of a million annually by contributions which, to use the forcible words of M. Say, were in most cases taken "from the bread of misery, if not from the fruit of crime," until 1823, the year when the last act was sanctioned for the sale of lottery-tickets. This act likewise contained provisions for the suppression of all private lotteries, and the sale in this kingdom of shares in any foreign lottery. This latter provision being extensively evaded, another statute was passed in 1836 (6 & 7 Wm. IV. c. 66), imposing a penalty of £50 for advertising foreign and other

This latter provision being extensively evaded, another statute was passed in 1836 (6 & 7 Wm. IV. c. 66), imposing a penalty of £50 for advertising foreign and other illegal lotteries. Devices are used, however, for the evasion even of this act.

Lotteries have been abolished in France, but they still exist in many other parts of the Continent. In Italy, their pestilential influence affects every town and all classes: each government has one, the tickets for which are sold in all the other states, and a drawing takes place every week or two; while, the tickets being infinitesimally divisible, chances may be purchased by day-labourers and beggars, who are there the most eager of all gamblers (Spaiding's Italy and the Italian.

Islands, vol. iii. p. 249). Lotteries are also (or were lately) sanctioned for public

purposes in several parts of the United States.

LUBEC, one of the Hanseatic states, consists of a town and small territory, lying chiefly at the mouth of the Trave, between Holstein and Mecklenburg. Area, including detached lands shared with Hamburg, 130 sq. miles. Population, 46,500; that of the city being 26,000. The government is vested in a senate and house of burgesses. 3

The city is clean, cheerful, and pleasantly situated, in lat. 53° 53′ N., long. 10° 41′ E., on an eminence between the Wakenits and Trave, about 10 or 12 miles from the mouth of the latter, where is Travemunde, its port, with which it communicates by means of lighters and steamers. Although by no means so important as formerly, it still may be considered a thriving town. It possesses various small manufactures, a considerable share of the carrying trade in Russian produce, and an extensive transit trade, particularly with Harsmun, distant only 36 miles, with which it is connected by means of the Trave and a canal. Exports, chiefly corn. Imports, French wines and silks, British manufactures, and colonial produce. From Travemunde steampackets sail regularly for Petersburg, Copenhagen, and Stockholm.

MEASURES, WRIGHTS, MORIES, DUTIES, &c.

per cent.

Treaty with Britain.—Since the article Harmon was written, a treaty supplementary to the one described under that head has been published, which provides for a more liberal intercourse

MEASURES, WEIGHTS, MONIES, AC.

Measures and Weights.—The ell of 2 feet = 29.70 Imp. inches.

The ahm of 29 viortels, 40 stubgen, or 80 kmnes = 31.87 Imp. gallons.

The last of wheat or rye of 8 dromts, 24 berrels,
or 96 scheffels = 11.04 Imp. quarters: the last
of oats, similarly divided, = 12.38 do.

The center of 8 lisponds or 112 Lubee Ibs. =
11.967 lbs. avoird.; and 100 Lubee Ibs. = 106.85
Ibs. avoird. Gold and silver are weighed with
the Cologne mark of 3608 troy grains.

Money.—Accounts are stated in marks of 16
schillings, each of 12 pfennings Lubec currency
or Lube. The mark, valued at the rate of 24 to
the Cologne mark weight of fine silver, is equal
1s. 24d.; and 16 marks 118 schill. = £1. The
dollar contains 3 marks. Foreign exchanges and stocknown
in marks banco, the agio on which, compared
with Lubec currency, is usually about 23 per cent.

Finances.—The public revenue is about 780,000
marks: the debt in 1836 amounted to 5,500,000
marks; the debt in 1836 amounted to 5,500,000
marks; the tast in 1836 amounted to 5,500,000
marks; the tast in 1836 amounted to 5,500,000
marks; the tast tast duty is from \$t\$ to \$per cent.

Treaty with the Hanse ports, and the duties of high reduce that all British vessels enterone described under that head has been published,
which provides for a more liberal intercourse

LUICCA. an Italian ducley, situated on the
W. coast, immediately N. of Thecany.

LUCCA, an Italian duchy, situated on the W. coast, immediately N. of Tuscany. Area, 420 square miles; population, 168,198. The capital, which bears the same name, has a population of 24,092. Government, an absolute monarchy.

name, has a population of 24,092. Government, an absolute monarchy.

The country is naturally divided into the Apennine region; the valley of the Serchio, including the highly cultivated plain of Lucca; and the coast district, in part marshy, but producing good pasture. Owing chiefly to the minute subdivision of land, there are no fewer than 25,000 petty proprietors, and from this circumstance the country is the most densely peopled of Italy, and indeed of Europe. The Lucchess are, however, industrious and shrewd; and many of them emigrate to foreign lands, where they work as stucco-image and plaster-cast makers. The duchy, though mainly agricultural, possesses a few manufactures of silks, woollens, cottons, linens, paper, and from. Its commercial intercourse is principally with Tuccany, especially Leghorn, between which place and the town of Lucca, by way of Pisa, a railway is in progress. Exports, mostly olive-oil (the best in Italy), with silk, timber, chestnuts, and fish. Imports, grain, seeds, wines, spirits, estile, hemp, flax, cottoms and other manufactured goods, tropical produce, salte provisions, and pig-iron. "The export trade," says Dr Bowring, "is about four millions of france (£160,000); that of oil amounts to 800,000 ft., and that of fresh fish gives to the district of Viergegio an annual sum of 250,000 ft. The imports nearly balance the exports; but considerable quantities of bullon enter the duchy in payment of articles, of which (from their not being charged with export duty) no account is kept at the custombouse."—(Report on Italian States, p. 66.) The only port is Viareggio, which possesses a roadstead frequented by coasting-vessels.

MEASURES, WEIGHTS, MONIES, &c.

Measures and Weights.—The woolen braceto but the pound "peso grosso" = 11 Leghorn = 23-8 Imp. inches; the slik braccio = 22-8 lmp. calcinate and slike property of the pound "peso grosso" = 11 Leghorn bearing the property of the pound in Luccoppo, reckoned generally at 24 lbs. peso grosso | Money.—Accounts are generally stated in Luccoppo, reckoned generally at 24 lbs. peso grosso in en of 3 soldi, each of 12 denari di lira. Payments are made chiefly in the money of Tuscophorn bearing of 3 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd. | 24 lbd.

MAC

exchanges and the usances of bills are regulated entirely by the custom of Leghorn.

Tradesmen sometimes reckon in gold crowns (acudi d'oro) of 30 soldi, each of 12 denari d'oro.

The gold crown = 73 line.

Principal Duties.—Cotton and linen manu-

LUGGER, a vessel with two or three masts, up and down which lug-sails are made to traverse, so that they may be readily set or taken in without going aloft. Slight, quick-sailing craft of this kind were used as privateers by the French in the last war. On the E. coast of England strong-built luggers are much employed

in the herring and mackerel fishery.

LUMBER, a term applied, chiefly in America, to timber through all its preparatory stages, from its growing in the woods until it be put into the hands of the artificer for the purpose of being worked up. It occurs principally in the form of scantling, deals, inch-thick boards, clap-boards, shingles, staves, and hoops.

Varieties of pine constitute the great bulk of what is usually denominated lumber. in British America.

LUSTRE, a plain silk and worsted fabric, similar to poplin.
LUTESTRING, a plain, stout, silken fabric, forming, with gros de Naples, of
which indeed it is merely a fine kind, "the staple of silks."
LYCOPODIUM, an inflammable powder used in fireworks, obtained from a

common moss-like plant of the same name.

Μ.

MACAO, a Portuguese settlement in China, lying in lat. 22° 12' N., long. 113° 34' E., on the west side of the entrance of the Canton river, on a poninsula projecting from a small territory separated from the continent by river-channels. Circuit about 8 miles. Population said to be 30,000, mostly Chinese. It is jointly ruled by Portuguese officers and a Chinese mandarin,—the latter possessing, however, all the real power.

ever, all the real power.

This place was granted to the Portuguese in 1898, in return for assistance afforded by them against pirates that had infested the coast; and it was at one time the centre of their intercourse with China, Annam, Blam, and Japan; but having suffered from that supine sloth which has involved all their Eastern empire, its trade is now quite inconsiderable. Of late, its chief or rather sole importance has been derived from its containing the dwellings of the Europeans trading with Canton, at which place they are only allowed to reside during the tea-season. Even at Macao the Portuguese and other strangers are lealously watched by the Chinese, who have a fortified barrier across the isthmas, beyond which foreigners are not allowed to pass. A ground rent of 800 tasis per annum is paid for this settlement by the Portuguese to the Chinese government, which, besides, levies a duty on the shipping. [China.]

MACCARONI is composed of wheaten flour, flavoured with other articles, and MACCARUNI is composed or wheaten nour, mayoured with other articles, and worked up with water into a paste, to which, by a peculiar process, a tubular or pipe form is given, in order that it may cook more readily in hot water; that of smaller diameter than maccaroni (which is about the thickness of a goose-quill) is called vermicelli, and when smaller still, fedelini. The finest is made from the flour of the hard-grained Black Sea wheat. Maccaroni is the principal article of food in many parts of Italy, particularly Naples, where the best is manufactured, and from whence also it is exported in considerable quantities. In this country macranical variability are cometimes used in source. caroni and vermicelli are sometimes used in soups.

MACE (Du. Foely. Fr. Macis. Ger. Muskatenblite. Por. Macis), a spice composed of the membranous tunic or covering investing the black shell in which the nutmeg is contained, and is first disclosed on the fruit ripening and bursting. When good it is thin, flexible, oily, of a bright reddish-yellow colour, has the sping odour of the nutmen but more nursent: and an aromatic bitterials the spicy odour of the nutmeg, but more pungent; and an aromatic, bitterish, acrid taste. That which is brittle, pale, and of little smell or taste, is to be avoided. Mace, though chiefly used for culinary purposes, is occasionally employed medicinally as an aromatic and stimulant. About 20,000 lbs. are annually entered for home consumption. [NUTMEG.] 5

MACHINERY for cotton-spinning and weaving is constructed on a great scale at Manchester; flax-mills at Leeds; marine steam-engines at Glasgow; and at Manchester; max-mins at Legus; marine steam-engines at Grasgow, and woollen and lace machines, locomotives, and an innumerable variety of other articles, at many places in Britain. We possess no means of computing the total extent of these manufactures; but in a late Report by a Committee of the House of Commons on the exportation of machinery (Par. Paper, 1841, p. 230) it is estimated that in eleven towns in Lancachire there are 115 mechanical establishments,

which have of capital invested, £1,515,000; and of herse-power, 1811; the whole capable of employing 17,382 hands. The trade owes its origin mainly to the discoveries of Hargreaves, Arkwright, Crompton, Watt, and Cartwright; and it is sustained almost wholly by the demands created in different branches of industry by these inventors, and others in the same walk, within our own country, as the exportation of machinery (excepting engines and common mill-gear) has from an early period been jealously prohibited, or restricted within narrow limits, with the view of protecting the home manufacturers. This began in 1696, by the prohibition of Leas' stocking-frame; other acts were passed in 1750 and 1774; after which the system appears to have been in much favour, as prohibitory acts then followed each other with great rapidity, and descending in some cases to very trifling obsystem appears to have been in much favour, as prohibitory acts then followed each other with great rapidity, and descending in some cases to very trifling objects. The existing enactments will be found under the head Cusroms Regulations (3 & 4 Wm. IV. c. 52, § 104); but, in pursuance of the recommendation of a Parliamentary Committee in 1825, a discretionary power of relaxing the law was in that year given to the Board of Trade, upon whose report an export-license (subject to a fee of £2, 2s.) is issued by the Treasury. The former decides upon each application to export according to its merits; and the rule adopted is described by Mr J. D. Hume, their former secretary, as follows:—"The license is freely given for all processes that are merely for dressing and preparing the fibrous substance, wool, cotton, flax, or silk; that while this substance remains only as a quantity of cotton or a quantity of wool, the prohibition is kept back and not allowed to apply; but that in the case of any machine which once takes the very first movement to the dividing of this substance preparatory to the spinning, the prohibition has been strictly enforced, and no license ever given. The retained part, therefore, is that which applies to the spinning or the dividing of the substance for the purposes of spinning; the handing it over, as it were, to a spindle to be spun." oses of spinning; the handing it over, as it were, to a spindle to be spun. Poses of Ibid. p. 4

The policy of still farther opening up the export-trade has been much discussed, more especially since the Report of the Committee of the House of Commons in more especially since the Report of the Committee of the House of Commons in 1841. This committee did not state any opinion upon the subject; but they laid before Parliament a mass of evidence, adduced from experienced customhouse officers, manufacturers, and engineers, which renders it no longer doubtful that "the mounds and fences" by which the shipment of machinery is restrained, are not only futile and unnecessary, but hurtful. It is shown to be impossible to prevent the illicit exportation of the forbidden kinds, more especially of the important parts, which are almost all of a minute description, and in separate pieces, such as bobbins, spindles, and rollers; further, that the prohibitory system, serving as a bonus to foreign machine-making, has tempted capitalists to embark in the trade; and Belgium, and many parts of Germany, France, Switzerland, and the United States, now abound in machine-factories, full of British tools, superintended by British workmen, and supplied early and systematically with drawings, models, or model-machines, as may be deemed best, of all new and improved apparatus; by which means the mechanists of those countries—Belgium especially—not only supply in most departments the home demand, but are beginning to export to greet works abroad, or to enter into engagements with existing establishments for erect works abroad, or to enter into engagements with existing establishments for the supply to the Continent of their prohibited inventions, and enormous loss is inflicted on the field of labour of this country, which, but for these restrictions, would, from its natural and acquired advantages, have been the machine-shop of the world. It is likewise shown that many other facilities besides the possession of improved machinery, require to be blended and enjoyed by foreign manufacturers before they can rival those of Britain; such as highly skilled, steady, and perbefore they can rival those of Britain; such as highly skilled, steady, and persevering artisans—minute subdivision, with at the same time combination and compactness of labour—contiguity of manufactories to the machine-shops, and the interchange of ideas thereby occasioned—the proximity of a cheap and plentiful supply of fuel and iron—the best markets for the raw material, and extended demand for manufactures—abundant capital—the first use of inventions—and, above all, security of property and freedom of industry.

The declared value of the shipments of machinery and mill-gearing in 1822 was £116,220; in 1825, £212,420; in 1830, £208,767; in 1835, £307,951; and in 1840, £593,064. This last sum included £294,148 for steam apparatus sent principally to France, Germany, and other parts of the European continent, and to India; £227,572 for all kinds of mill-work and machinery allowed to be exported by law, shipped generally to most parts of the world; and £71,244 for machinery exported under license, and sent chiefly to Germany, Russia, Belgium, and France.

The importation of foreign inventions is encouraged by the allowance of a patent

for a limited time to the first user. See IRON, in Supplement.

MACKEREL, a fish (Scomber scombrus) well known for its beauty and its intrinsic value as an article of food. It is caught on some parts of our coast in every month of the year, but those taken in May and June are generally preferred. They are found in abundance on the south and south-east shores of England; and the mackerel season at the various fishing towns is one of great bustle and activity. They are plentiful on the Devoushire coast, and swarm in West Bay about June. On the Hampshire and Sussex coasts they generally arrive in March. At Lowestoff and Yarmouth, the great harvest is in May and June. Their ordinary weight is about 2 lbs. each. The largest are not considered the best. They require to be eaten very fresh, as they soon become unfit for food; and on this account they are allowed to be cried through the streets of London on Sundays,—a practice which has prevailed since 1698. During the season, about 100,000 are brought to Billingsgate in one week. A last of mackerel is 10,000. S

MADAGASCAR, a large siland lying between lat. 12° and 25° 45′ S. about 240.

MADAGASCAR, a large island lying between lat. 12° and 25° 45′ S., about 240 miles distant from the E. coast of Africa, from which it is separated by the channel of Mozambique. Area, about 225,000 sq. miles. Population vaguely estimated at 5,000,000, composed of numerous tribes, one of which, the Ovaha, exercises a nom-

5,000,000, composed of numerous tribes, one of which, the Ovahs, exercises a nominal sovereignty over the whole.

The island contains extensive and fertile plains, interspersed with mountainous districts, which render the climate of the interior milder than might be expected from the latitude; but the coast, being generally low and in many places swampy, is oppressively hot and unhealthy. The inhabitants are almost all naked barbarians, except the Ovahs, who possess a civilization akin to that of the Javanese; and many European arts were introduced among them by King Radama, an energetic reformer, who died in 1828. The chief places of commercial resort are Bembatooks Bay, on the W., and Tamatave on the E., from whence rice, cattle, tortoke-shell, amber, &c. are sent to Mauritius. The French have settlements on the 1818 Marle, and at Foul Point Bay, &t Luce Bay, and Fort Dauphin, where they cultivate sugar and coffee for exportation to Bourbon.

MADDER (Du. Mee, Krap. Fr. Alisari, Garance. Ger. Krapp, Färberröthe.

It. Robbia. Sp. Gransa, Rubia), a cheap, durable red dye, obtained from the root of a trailing plant (Rubia), cultivated in Alsace and Provence in France, especially near Avignon, in Dutch Zealand, Asiatic Turkey, and in Italy; from which places it is largely exported. The Turkey and Provence madder is procured from the

near Avignon, in Dutch Zealand, Asiatic Turkey, and in Italy; from which places it is largely exported. The Turkey and Provence madder is procured from the variety termed Rubia peregrina; the remainder from the Rubia tinctoria. The substance contains at least two distinct colouring principles, a fawn and a red; yielding two tints, namely, madder-red, which contains the whole of the colouring matter, and Turkey-red, the superior brilliancy of which arises from the red portion being alone preserved. Madder is extensively used for dyeing calico, linen, and woollen cloth, and in the preparation of madder-lakes. The roots are taken up at the end of September and kiin-dried. The best are about the thickness of a goose-aulil, semi-transparent: when broken, of a reddish colour, verging towards up at the end of September and kiln-dried. The best are about the thickness of a goose-quill, semi-transparent; when broken, of a reddish colour, verging towards purple, possessing a strong smell, and having the bark smooth: a yellow hue indicates inferiority. The importations from Turkey (via Smyrna) and Italy consist entirely of the roots in their natural state; but the whole of the Zealand madder, and the greater part of the French, is shipped in the state of powder. In Zealand, previous to grinding, the roots are carefully assorted: the interior bright part of the finest makes orop-madder; ombro is prepared from good roots not peeled; gamene is the ordinary powder; and mull, made from peelings and refuse, is an inferior sort used for cheap dark colours. In France, it is prepared nearly in the same manner. Madder may be preserved a long time, but being injured by moisture, which it readily absorbs, it should be kept in a dry place.

The importations of this commodity for home consumption have been doubled

The importations of this commodity for home consumption have been doubled within the last ten years, and now rather exceed 200,000 cwts.; about one-half being in the form of powder, and the remainder the roots in their natural state. The former is brought wholly from France and Holland; the latter principally

from Turkey, and in smaller quantities from Italy and France. Small parcels of madder are also brought from Spain. [MUNJEET.] 5

The following extract from the London Price Current of February 1842, gives a

The following extract from the London Price Current of February 1842, gives a comparative view of the estimation in which the different kinds are held in the British market:—

Madder Roots.—Turkey, £2, 8a. to £2, 10a. per cwt.

Madder.—Dutch, crop, per cwt., £3, 5a. to £4, 10a.; Ombro, £2, 8a. to £3; Gamene, £1, 10a. to £2; Mull, 7a. 6d. to £1; French, £2, 10a. to £3, 6a.; Spanish, £1, 6a. to £1, 16a.

**MADEIRA*, a fertile and beautiful island belonging to Portugal, lying about 450 miles W. from the coast of Morocco. Area, 300 sq. miles. Population, including Porto Santo, about 112,600. Funchal, the chief city and port, pop. 20,000, is the

residence of the governor of this island and of the adjoining islets, Porto Santo and Desertas. S

residence of the governor of this island and of the adjoining islets, Porto Santo and Desertas. S

Madeira consists of one large mountain, with branches rising every where from the sea towards the centre of the island. The climate is very mild and healthy; the mean temperature of the year not exceeding 65°. Vines form the chief object of cultivation, and large quantities of the wine produced are exported, particularly to England, where its consumption was facilitated by the Michven treaty [Winn], and to the United States. A tenth part of the whole is taken for taxes; the rest is divided between the proprietor and farmer. The growth of the island was formerly estimated at 30,000 plees, but it does not now exceed 18,000, of which only the better sorts are exported, the remainder being made into brandy for the Brazils, converted into vinegary, or used as home. This decline, stirrbuted partly to the frequency of adulteration, and partly to the preference given to sherry and French wines, has led to a great part of the soil being applied to other purposes. The culture of potatoes and other provisions has been extended on the ligher grounds. The planting of coffee has also become very general in the island, and with considerable success. The sugar-came has been tried, but does not repay it expense.

The only port is Funchal, in long, 17° 6° W., lat. 38° 37° N., an irregularly built, dirty town, situate in the centre of a large bay. It is strongly fortified, but has no harbour, and the roadstead is not secure, especially in winter. The merchants are chiefly English.

The exports, amounting annually to about £240,000, consist principally of wine, with fruits, dragon's-blood, honey, wax, orthit, tobacco, and abip-provisions. The imports are chiefly cotons, woollens, and other manufactures from Britain : sheep, salted provisions, fish, oil, timber, and come is with tropleal produce of different kinds from United States, Portugal, Genoa, and other places. About 50,000 tons of shipping enter the port annually, of which abo

MAGNESIA, a well-known medicinal earth, commonly obtained by burning the MAGNESIA, a well-known medicinal earth, commonly obtained by burning the carbonate of magnesia, whence it is sometimes called calcined magnesia. It is a white, soft powder, and possesses neither taste nor smell. The carbonate of magnesia is found in a natural state in Piedmont, Moravia, Hoboken in N. America, and in the East Indies, but it is neually manufactured from the bittern of sea-salt works. It is a white, light powder, resembling the pure earth, but possessing only about one-half of its strength.

MAGNET, a combination of the protoxide and peroxide of iron. [Compas,] MAHOGANY (Sp. Caoba), the timber of a stupendous tree, of which there are several varieties, the principal being the Swietenia mahagoni, a native of the West Indies and Central America, and found in luxuriant condition in the rich valleys among the mountains of Cuba, and those that open upon the bay of Honduras. It is supposed to take about 200 years to arrive at maturity. This wood was first

among the mountains of Cuba, and those that open upon the bay of rhonduras. It is supposed to take about 200 years to arrive at maturity. This wood was first introduced into England in the beginning of last century, since which, though costly, it has become the principal timber for furniture and cabinet making, having entirely supplanted the walnut, formerly in general use for the same purposes. From 20,000 to 25,000 tons are now annually imported into Britain; threeposes. From 20,000 to 25,000 tons are now annually imported the fourths of which are brought from Honduras, and the remainder from Cuba and

Hayti. S

The timber is best upon the coldest soils and in the most exposed situations. When it grows upon moist and warm lands, it is soft, coarse, spongy, and contains sap-wood, into which some worms will eat. That which is most accessible at Honduras is of this description; and therefore it is only used for coarser works, or for a ground on which to lay veneers of the choicer sorts. When grown among rocks and much exposed, the size is inferior; but the timber is superior in strength, and the colour is richer. "Since the produce of Jamaica has been nearly exhausted, there are only two kinds known in the market,—Bay-wood, or that which is got from the continent of America, and Spanish-wood, or the produce of the islands, chiefly of Cuba and Hayti. Though the Bay-wood is inferior to the other, both in value and in price, it is often very beantiful, and may be obtained in logs as large as ix feet square. It is, however, not nearly so compact as the other; the grain is apit to rise in polishing, and, if it be not covered by a water-proof varnish, it is very easily stained. It also gives to the tool in carving, and is not well adapted for roraments. Spanish-wood cuts well, takes a fine polish, resists exactions, stains, and fractures much better, and is generally the only sort upon which much or delicate workmanship should be expended."—(Léo. of Batt. Knowledge: Veg. Substances, vol. i. p. 181.)

There are two East Indian species, but they are not imported in any quantities into this country: The S. febrifuge, likewise a gigantic tree, grows in the mountains of central Hindostan; its wood is of a dull red colour, hard, heavy, and durable: and the S. choroxylon, a smaller tree, found in the mountains of the Circars; its wood is of a yellow colour, resembling box.

MAIZE, or INDIAN CORN (Zea Mays), the most productive, and at the same

MAIZE, or INDIAN CORN (Zea Mays), the most productive, and at the same time the most unequal in its produce, of all the grains. The ears consist of a cylindrical substance, over which the seeds are ranged in eight or more straight rows, each of thirty or forty grains. The prevailing hue of the corn is yellow of various shades. The produce varies in the same field, according to the season,

from 40 to 200 or 300 for one. Fertile lands usually afford a return of 300 or 400 fold. Maize does not suffer from cold until the mean temperature falls to 45°, and no heat is injurious to it. It forms a principal food in the United States, Mexico, Africa, and some parts of the East Indies. In the East it is considered as an inferior grain, and bears the same rank in relation to rice that cats or barley does to

wheat in Britain. A small variety is partially cultivated in the south of Europe; but the attempts made to introduce it into this country have been unsuccessful. SMALACCA, a settlement of the East India Company, extending about 40 miles along the shore of the Malay peninsula, by 30 inland. Area, 800 sq. miles. Population, 22,000, chiefly Malays. The town is in lat. 2° 14′ N., and long 102° 12′ E.; lation, 22,000, chiefly Malays. The town is in lat. 2° 14' N., and long. 102° 12' E.; pop. 12,000. The government is vested in a resident, deputy to a chief resident at Singapore.

at Singapore.

Malacca was taken from the Dutch during last war, and restored at the peace in 1815; but in 1825 it was received from them in exchange for settlements in Sumatra. It is not a place of much value. The soil is deficient in fertility; and its foreign trade has been supplanted by the two great emportums in its neighbourhood, Singapora and Parango. The climate is reckoned healthy, Fahrenheit ranging only from 72° to 85°. The productions are tin and fruit, with a little gold. Provisions are cheap. Large ships anchor about 1½ mile from the town.

Measures and Weights.—The covid = 18} Imp. inches. The Malay pecul of 100 catties = 135 lbs. avoird; 3 peculs = 1 behar; the last of 50 measures or 500 gantons = 29 cwts. avoird. nearly; the coyan of rice or sat is 40 peculs; the kip of tin-is-agual about 40 lbs. avoird. Gold and silver are weighed by the buncal of 852 troy grains. Money accounts are stated in Spanish dollars of 100 cents, which form the general currency of the "Straits." A variety of Indian and Dutch colns are also in circulation.

coins are also in circulation.

MALT, barley-corn which has been subjected to artificial germination, and then dried in a kiln, processes by which its farina is mellowed or sweetened, and so fitted for the purposes of the brewer. [Been.] The first operation is that of steeping the grain in water, when it absorbs moisture, softens, and swells; it is then subjected to couching and sooring, by which it becomes warm and sweetens, and germination is allowed to proceed until the acrospire, or rudiment of the future stalk, is ready to burst the shell, at which stage it has acquired its maximum of saccharification. It is then kiln-dried at a low or high heat, according as it is wanted to be pale, amber, or brown. The pale or amber malt, the only kinds which yield the saccharine or fermentable extract, should, when good, be compact but friable, white and mealy in their fracture, of an agreeable somewhat pungent smell, not smoky, and of a pleasant sweet taste. The brown malt is not fermentable, but is employed to impart flavour. Besides these there is black or patent malt, a roasted kind, employed instead of burnt sugar merely to colour porter. Malting a roasted kind, employed instead of burnt sugar merely to colour porter. Malting is not usually conducted during summer, because in hot weather the grain is apt to become mouldy.

The quantity of malt consumed in England has been long very considerable; but it has not increased in a degree proportional to the increase of the population, —a circumstance attributed partly to the more general use of tea, soffee, and other beverages, and partly to the higher price of malt liquors arising from the augmented duties on malt and beer, and the limited supply to be obtained in this country of fine barley suited for malting. Thus the quantity charged with duty in England was, in 1703, 26,754,505 bushels; in 1750, 29,284,786 bushels; in 1790, 21,976,959 bushels; and in 1810, 23,546,346 bushels. Little difference occurred in these quantities until of late wars when a climbular was in the requestion of the research when requestions to the requestion of the research was the reduction. tities until of late years, when a stimulus was given to consumption by the reduction of the duty on malt in 1822, and still more by the abolition in 1830 of the beer duties, as will be seen by the following table, which shows the quantity of malt charged with duty, and the amount of revenue received thereon in various years since 1820, in the different divisions of the kingdom:—

Усаль.	England.	Scotland.	Ireland.	Total.	Net Duty.
	Busheir	Bushels.	Bushels.	Bushela	£
1820	23,884,242	1,182,208	1,793,671	26,860,121	5,068,195
1825	29.572.741	3,925,847	2,706,862	36,205,450	4,384,163
1830	26.900.902	4,101,946	1,959,606	32,962,454	3,436,271
1835	36.078.856	4,459,553	2,353,645	42,892,084	5,499,885
1836	37,196,997	4,903,187	2,287,535	44,387,719	5,699,879
1837	33,692,356	4,583,446	2,275,347	40,551,149	5,216,967
1838	33,823,985	4,419,141	2,262,440	40,505,366	4,932,080
1839	33,826,016	4,360,373	1,744,559	39,930,941	4,845,949
1840	36,653,440	4,397,304	1,406,112	49,456,856	4,983,602
1841		-,,,	.,,	-2	.,,

Of the sixty excise "collections" into which England and Wales are divided, the ten following are those from which the largest amount of malt duty is obtained:

eds, Suffolk, Bedford, Cambridge, Hertford, Surrey, Grantham, Norwich, Essex, and Lincoln.

and Lincoln. S

The Duty on mait in England was first imposed in 1667, when it was fixed at the rate (reckoned in Imperial measure) of 646d, per bushel; which, in 1760, was increased to 92 Ad.; in 1780, to 1s. 44d.; in 1781, to 1s. 74d.; but in 1792 it was reduced to its former rate of 1s. 44d.; in 1803, it was increased to 92. 5d.; in 1803, to 4s. 58d.; in 1816, it was again reduced to 2s. 5d.; which rate lasted only till 1819, when it was raised to 3s. 7d.; in 1829, it was fixed at 2s. 7d. per bushel; since which no alteration has been made.

In Scotiand, the duty commenced in 1713, and in Ireland in 1785; and after various fluctuations was fixed, in 1822, in both countries, at 2s. 7d., as in England,—that made from here or bigg, however, being only 2s. per bushel.

The charying and collection of the duty are regulated by the acts 7 & 8 Geo. IV. c. 52, 53, and 81; 11 Geo. IV. c. 17; and 7 & 8 Wm. IV. and 1 Vict. c. 49. By the first-mentioned act every person making mait is required to enter his premises and utensits with the excise. An individual residing in a remote part of any collection, and making mait solely for domestic use, may be entered as a by-mailter; but the excise officer must take a gauge of each steeping, after which his surveys are not required to be made oftener than once a-week, until the grain is dried off. If mait be made for private use in considerable quantities, the person making it ceases to be considered a by-mailtiter.

be made for private use in considerance quantum quantum private use in considerance quantum private use in considerance in the act 7 & 8 Wm. IV. and 1 Vict. c. 49, § 9, fixes the following allowances to be made for the increase in the several gauges, in consequence of the swell of the corn; namely, while the grain is in the cistern, or in the couch, or directed to be deemed so, an allowance of 13 bushels per 100; when the grain is on the floor, or on the kiln, after the expiration of 26 hours, if it has been previously gauged, or if it has not been so after the expiration of 30 hours, an allowance of one-half; the duty to be charged on the best gauge.

For the other regulations we must refer to the acts themselves. [Cons.]

MALTA, an island possessed by Great Britain in the Mediterranean, about 60 miles S.S.W. of Sicily. Extreme length, 17½ miles, and breadth, 9½ miles. Area, 95 sq. miles. Population in 1839, 105,456, including 5204 British, and 4661 aliens. The local government is vested in a military commander, who, in legislative matters, is assisted by a council of six persons nominated by the crown.

is assisted by a council of six persons nominated by the crown. S

The S. coast is rocky and inaccessible, but the ground alopes from thence to the N. side, and the island is in general flat. It possesses no rivere, and few springs; and its aspect is sterile. About one-half of the whole surface, however, has been subjected to cultivation. The staple produce is cotton; the chief other productions are wheat, barley, pulse, fruit, septically oranges, potatoes, salt, and cummin seed; but the grain raised is equal only to about one-third of the consumption, and very few cattle or sheep are bred. Imports, chiefly wheat and other grain from the Black Sea and Sicily; British manufactures; sugar, coffee, and leaf tobacco; live-stock, chiefly from Africa; oil and wine from Sicily and Italy; spirits, wood, coals, and cheese, with a variety of other articles; the whole amounting annually to about £600,000. Exports, cottons, sall-chiefly arms of Maltese manufacture; also cabinet-work, gold and silver filigree work, and cutstone, segars; with reshipments of colonial produce, grain, British manufacture, and wine; the whole amount being from £300,000 to £400,000. About 1800 vessels annually arrive, having an aggregate burthen of 190,000 tons; of which, however, 680 vessels, burthen 13,000 tons, consist of small craft chiefly trading with Sicily. The Maltese are expert carpenters and active seamen; and shipbuilding is on the increase, the vessels being registered as British: about 1600 tons were built in 1839.

small craft chiefly trading with Sicily. The manuser are vapor to the shipbuilding is on the increase, the vessels being registered as British: about 1600 tons were built in 1839.

La Valetta, the port, citadel, and seat of government, lies in lat. 35° 54′ N., long. 14° 31′ E., on the N.E. coast, on a narrow neck of land forming two harbours, the whole of which is defended by stupendous fortifications. The northern harbour is solely appropriated to the purposes of quarantine. The Southern or Grand Port is large, safe, and commodious, runing up 15 mile in a B.W. direction; and the shore is so bold that a line-of-battle ship may lie close to it. On the Valetta side. it is one continued line of wharf for the accommodation of merchantmen. Population, including the three districts of Cospicus, Vittoricas, and Sengies, on the opposite side of the harbour, about 50,000. Provisions are abundant and cheap, and water is supplied from tanks. The climate, though warm, is in general eslubrious, especially between October and May. The "is stroce," or S. E. wind, which mostly prevals in September, is oppressive and enervating; though the "gregale," or N. E. wind, in winter, is that which blows with the greatest fury.

Maits was a place of great importance during last war, having become the emporium of that commerce which was shut out from the Continent by the operation of the Berlin and Milan decrees; but it received a sudden interruption from the plaque, which broke out in 1813; and the quarantine regulations afterwards maintained in Italy and France on vessels arriving from the island, operated for a long time most prejudicially to trade. In 1836, these restrictions were repealed. More recently, Valetta has been made a free port,—a circumstance which, joined to its being the principal British naval station in the Mediterranean, as well as the most advantageous point of rendexvous for steam-vessels plying between Italy, France, and England, and the Jevant, to supply themselves with coals, render it of great importance both i

Measures and Weights.—The canna of 8 pal-ni = 82 Imp. inches, but 3½ paimi are commonly 4½ Imp. gallons; and 2 caffisos = 1 barile of oil. reckoned equal to 1 yard. The salma of land of The salma of corn (stricken measure) = 7½ Imp. 16 square tumoli = 444 Imp. acres. The barile | bushels.

The cantaro of 100 rettell or pounds = 174) lbs. avoirdupols, but is commonly reckoned at 175. The pound of 12 ounces, used in weighing gold and silver = 4868 troy grains.

Money.—Accounts are kept by the government in sterling, but by the mercantile classes in soudi of 12 tari, each of 20 grani. 23 soudi = 1 pessa or Sicilian dollar = 474d. valued in silver, or 494d. In gold; but is commonly estimated at 4s. 2d., and the Maltees soude at 1s. 8d. The other montes consist chiefly of Spanish and American dollars, and of British silver and copper. Notes are issued by two banks (established en commandate), but only to

a small extent, not exceeding £30,000; while the coin in circulation is estimated at £150,000. Bills on London are commonly drawn at 30 and 00 days 'agit; and the ordinary fluctuations of the exchange are from about 482d. to 50d. per pexus. The Revenue averages £100,000 per annum; of which, derived from crown property, £28,000; corn duty, £30,000; customs and port dues, £14,000; axcies, £16,000; quarantine dues, £4000; judicial fees, £4000; union taxes, £5000; Judicial fees, £4000; minor taxes, £5000. The customs and port duties and warehouse rent are exceedingly small, imposed for the sake of revenue only, and without regard to the country from whence the vessels arrive.

The importance of Malta began in the 16th century, when it was ceded by Charles V. to the Knights of St John of Jerusalem. In 1798, after a mere show of resistance, it was taken by Napoleon; and in 1800 it was reduced by the United British and Maltese by blockade.

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MALTER, a German corn measure, varying in different places.

MALTER, a German corn measure, varying in different places.

MALTHA, a variety of bitumen supposed to be inspissated Perroleum.

MAN, ISLE OF, is situated between Cumberland and the N. of Ireland. Area, 220 sq. miles. Population in 1841, 47,985. It was long held in feudal sovereignty by the Earls of Derby, descending from them to the Dukes of Atholl, from whom it was purchased in 1765; the island retaining, however, most of its peculiar laws. The administration is vested in a governor and council, and the "House of Keys," a self-elected body; the whole forming what is called the Court of Tynwald.

a self-elected body; the whole forming what is called the Court of Tynwald.

The island is intersected by a ridge of mountains which run from N.E. to S.W., and many parts of the coast are rocky; but there is still a considerable extent of level territory, though no part is very productive, and improvement has been retarded by the division of the land into small farms. Of late, however, the decay of the herring-fishery has led to more attention being given to agriculture, the advancement of which is facilitated by the quantity of sea-weed fitted for manure which is thrown upon the shores; while the industry of the islandars has been promoted by improved fiscal regulations, and their increased intercourse with Liverpool, Glasgow, and other places, since the development of steam-navigation. The exports consist principally of grain, potatoes, eggs, lime, lead and copper ore, herrings, linea, and paper, mostly all sent to Liverpool. Douglas, on the S.E. coast, is the only port of consequence.

CURRENCY, DUTIES, &c.

Douglas, on the S.E. coast, is the only port of consequence.

Manx Currency is in value \$\foath\$ less than that of Britain,—the British shilling being reckoned at 14 Manx pennies, or £100 sterling £116.

3a. 4d. Manx; but by act of Tyawad of Nov. \$\foath\$, 1830, all transactions are now held to be in sterling. Measures and weights are now allow reckoned by the Imperial standards.

A joint-stock bank has been established, with a paid-up capital of £30,000.

The Duties in Man are in general considerably lower than those payable in Britain. The distinction led formerly to a great deal of smuggling tuthis is now checked by allowing only certain quantities of those commodities which had been the subject of the courtaband trade, to be imported into the island under a customs license. The aristing regulations are embodied in the act 5 & 4 Wm. IV. c. 60; and the following are the principal duties, with the quantities of those goods admitted only under license:—

Coffee, 4d. per 1b.; foreign spirits (29,000 gallons), 4a. 6d. per gall.; colonial rum (80,000)

MANDATE. [Principal and Agent.]

MANDAOE. [Cassava.]

MANDAOE. a very brittle metal of a dusky white colour, and without either malleability or ductility. Sp. gr. 8. The substance known in commerce under that name, however, is the peroxide, or black oxide, of the metal. It occurs native found in a variety of forms; most commonly it is of an earthy appearance, and in the Mendip Hills in Somerset, and in the counties of Devon and Aberdeen. It is found in a variety of forms; most commonly it is of an earthy appearance, and mixed with other ingredients; but sometimes in crystals of a black colour and metallic lustre. Peroxide of manganese is largely consumed in the manufacture of bleaching compounds; it is also used by potters and glassmakers; and in the laboratory it is considered the cheapest material from which to procure oxygen.

MANGEL WURZEL, a species of BEET, used as winter food for cattle, a purpose to which it has been long applied in Germany, though its introduction into

this country dates only from the end of last century. The plant is nearly of the same duration and habits as the turnip; and though the Swedish variety of the latter exceeds it, weight for weight, in the quantity of nourishment, yet, on good light soils, the produce of beet is much greater. In Guernsey, crops have been raised of 100 tons per acre.

MANGO, the fruit of the Mangifera Indica, sometimes imported from India as a pickle. It is kidney-shaped, of a delicious flavour, and contains a flattened stone. There are, however, many varieties.

MANHEIM GOLD, or Similor, consists of 3 parts of copper and 1 of zinc. A little tin is sometimes added, which, though it may improve the colour, impairs the malleability of the alloy. It is from this that the spurious leaf-gold, laces, and

malleability of the alloy. It is from this that the spurious leaf-gold, laces, and other articles, are manufactured.

MANILLA. [PHILIPPINE ISLANDE.]

MANIFEST, a document containing a specific description of a ship, her cargo, and passengers; it is signed by the master at the place of lading.

MANNA, the concrete juice of the manna ash (Frazinus ornus), collected principally in Calabria and Sicily. The best, called flake manna, is in oblong, light, friable pieces, of a whitish colour, and somewhat transparent, with a sweetish, sharp taste, and a weak smell. The inferior kinds are moist, unctuous, and dark-coloured. It is a mild aperient medicine.

MAPLE a timber-tree of which there are many varieties. The common British

MAPLE, a timber-tree, of which there are many varieties. The common British maple (Acer campestre), is a small tree, the wood of which is of little value, except to the turner, who makes it into cups, bowls, &c. The sycamore maple, called in Scotland the plane-tree (A. pseudo platanus), is chiefly used for coarse work where lightness and toughness are required. The sugar maple (A. saccharinum), abundant in N. America, is so called from the saccharine matter obtained by tapping tis trunk in spring, and which in Canada is largely manufactured into sugar; its wood is hard, and has a satiny lustre, but being readily attacked by insects, it is not of much value, except when its grain is waved, and then it is in request for cabinet-work: the wood of old trees is esteemed for inlaying mahogany, and is

MARBLE, the granular limestone, or carbonate of lime, of mineralogists, is a massive beautiful kind of stone, somewhat translucent, of various colours, and frequently veined or spotted. Sp. gr. 25 to 28.

frequently veined or spotted. Sp. gr. 25 to 28. B

Granular limestone is found in many, if not in most primitive countries; it sometimes forms entire mountains, but more often occurs in beds. The most celebrated statuary marbles of ancient times were found in the islands of Paros, Naxos, and Tenos, in the Archipelago. Parlau marble is white, large grained, and considerably translucent. The Pentelicon, taken from quarries on a mountain called Pentelicus, near Athens, is traversed by greenish or graylab veins, which are commonly micaceous. The marble of Carrara has a finer grain and closer texture, and is that now usually employed by statuaries; the quarries of this marble are on the eastern coast of the Gulf of Genoa, and are worked on the face of a mountain to the height of about 800 feet. Beautiful marbles for chimney-pieces and ornaments are found in various parts of the United Kingdom, and in other countries. In England, they are abundant in the counties of Derby, Devon, and Angiesca, the last being of a green colour; in Scotland, at Asynt, in Sutherlandshire; Ballachullah, in Argyllahire; and in the islands of Tiree. Skye, and Jura; in Ireland, in Kilkenny and other places. The Kilkenny marble is black, and encloses shells of a whitish colour, which, when cut, precents segments of circles. The Cotham, Ruin, or Landscape marble of Bristol, exhibits when polished the appearance of a landscape or ruins; it is common in the Val d'Arno, near Florence. The Lumachelli or Fire Marble, found at Bleyberg, in Carinthia, exhibits beautiful iridescent colours, which are sometimes prismatic internally, but more commonly of various shades of orange or red.

MARITIME LAW. [Mastre. Navigation. Scawen. Supplied &c.]

MARITIME LAW. [Master. Navigation. Seamen. Shipping, &c.]
MARK, the name given to a money of account in Hamburg, Lubeo, Denmark,
and Norway; to a weight, used chiefly for gold and silver, in different parts of the
Continent, varying from about 3500 to 3700 troy grains; and to an ancient money

of England and Scotland. [Cors.]

MARKET, a kind of minor Fair, usually held once or twice a-week in most towns, for the sale of provisions or live-stock. The following are the principal markets of the metropolis:—

Swithfield cattle-market is held every Monday morning; also, though on a smaller scale, on Priday. In Mr Knight's valuable work "London" (vol. it. p. 325), the sales in 1839 are stated as follow:—180,780 cattle, 1,380,280 sheep and lambe, 254,672 pigs, 22,500 calves; and, taking the average weight of the cattle at 640 lbs., of the sheep and pigs at 96 lbs., and of the calves at 140 lbs., the total number of lbs. of mest is 273,881,713; which, at the average price of 6d, per lb., would amount to £6,847,042; while at 7d. it would be £7,882,105. Smithfield is the only cattle-market in London; but large quantities of "country-killed mest" are now sent up by steam-boats and railways, principally to the carcass-butchers of Newgate and Leadenhall markets. The graziers usually consign their animals to salesmen, whose drovers meet the country drovers at the outskirts

MAR 466 MAS

of London. The salesmen charge 2a 4d. for each "beast." The city derives a gross revenue of £6000, and a net revenue of £3000 a-year from the market.

For details of removal of Smithfield market. See Markers, in Supplement.

For details of removal of Smithfield market. See Markers, in Supplement.

Mark Lane core-market consists of two buildings. The first is a quadrangular paved court, surrounded by a colonnade, in which are seats for the core-factors, who have each a deak containing samples. The second is a splendid Greek Doric building, which was erected in 1823 at an expense of £50,000. The interior consists of the sale-room,—a spacious and well-lighted hall, comprising the corn and seed markets, containing 53 stands for the factors. A hotel, coffechouse, and reading-room are attached to the institution. The chief business is transacted here on Mondays, though Wednesdays and Fridays are likewise market-days. [Coan.]

Billiangsgate fish-market, situated at the western extremity of the customhouse, is held daily; mackeres alone, however, being allowed to be sold on Sunday. Separate divisions are assigned for each kind of fish. From 4000 to 5000 fishing-vessels are annually entered at the customhouse. The cargoes are consigned to an intermediate class between the fishermen and the retail dealers, termed salesmen, who alone have stalls in the market, and who are obliged by the regulations to fix up in a conspicuous place a statement of the kind and amount of their stock. Their sale begins at 5 a.m., on the ringing of the market-bell, except that for cysters, which does not commence till 6 o'clock.

MARL, a mixture of limestone and clay, produced by the decomposition of shells in bogs and standing water. It is of a yellow or reddish-gray colour, and falls to pieces on exposure to the air. It exists in many parts of the United Kingdom, and is much used as a manure.

MARMALADE, a confection generally made of oranges boiled with sugar.

MARSH-MALLOW, a perennial indigenous plant common in marshes near the
sea, but in some parts of the Continent cultivated for its root, which is used in
medicine for all cases in which emollient or demulcent substances are required.

The root is about the size of a finger, white, and carrot-shaped.

MASLIN, a mixture of rye and wheat. It is very extensively grown in Durham, where bread made of this compound is in general use. It is mixed in all proportions, from g of wheat to g of rye, and from g of rye to g of wheat, according to

MASSICOT, an oxide of lead prepared from the dross of the melted metal. It is of a pale yellow colour, and is used as a pigment.

MASTER OR CAPTAIN OF A SHIP is the person put in charge and command of a ship during her voyage. The master of a British ship must be of the class of persons pointed out by the act for the encouragement of British shipping (3 & 4 Wm. IV. c. 54, \$ 16). [NAVIGATION.] The master is an agent [Principal and Agent], with ample powers to represent the owners in the management of the concerns committed to him. They are liable for such engagements as he may enter into for the necessary and usual employment of the ship, and for such acts as he may do in his character of master within this limit. If the owners themselves appear, and make a special contract regarding the service of the ship, the master cannot substitute another on his own authority. Where the authority of the master is questioned, the law on the subject will generally be influenced by the custom of merchants. Charter-parties [which see] are generally the sole act of the owners themselves; but the master may be empowered to enter on a charter-party, and to bind the owners; and when he is abroad, this right is inherent in his office. In the case of a general ship, the owners rarely interfere to regulate the engagements with the particular merchants who furnish the cargo, and they are undoubtedly bound by every engagement made by the master relative to the usual employment of such a vessel. When the master binds the owners to repay money borrowed to accomplish repairs, or the price of repairs, stores, and provisions, he becomes, in the first plish repairs, or the price of repairs, stores, and provisions, he becomes, in the first place, himself personally bound, unless he, in express terms, confine the obligation to the owners. "But such a contract made by the owners themselves, or under to the owners. But such a contract made by the owners themselves, or inter-circumstances which show that credit was given to them alone, gives the creditor no right of action against the master "(Shee's Abbot, 115). To render the owners liable,—when supplies are furnished, they must be reasonably proper for the occasion; and when repairs are undertaken, they must be necessary. The general rule on which the master should act is, to restrict himself to those obligations which a prudent owner would himself incur in the circumstances. "The creditor is rese prucent owner would nimself incur in the circumstances. "The creditor is required to prove the actual existence of the necessity of those things which give rise to his demand. The authority of the master is to provide necessaries; if, therefore, a person trust him for a thing not necessary, he trusts him for that which it is not within the scope of his authority to provide" (Abbot, 120). If the master expend money of his own for such purposes, he is entitled to demand repayment. In a home port the authority of the master to incur such obligations may be superseded by that of the owners or a shipshushand. In the master's present a provider of the owners or a shipshushand. In the master's present a provider of the owners or a shipshushand. by that of the owners or a shipshusband; but the master's presumed power warrants individuals in contracting with him, unless they are aware of his being so superseded. The master may hypothecate the ship, or give the creditor a right to a security over it, for the expense of repairs in a foreign but not in a home port. Ireland has, for this purpose, been held a foreign country in the case of an English ship. [BOTTOMEY AND RESPONDENTIA.] It has been found that the master has no lien on the ship, for expenditure which he may have himself undertaken for repairs, or for recourse in the case of his having had to make good obligations incurred on account of repairs (Hussey v. Christie, 9 East. 426). It is the duty of the master, like every other agent, to use his own endeavours for furthering the interest of his like every other agent, to use his own endeavours for furthering the interest of his of the trust calls on him for a corresponding exercise of vigilance and skill as an agent. He is responsible for losses occasioned by his misconduct or blunder. [Barratey. Insurance. Shipping.] There are many statutory regulations to which he must attend, in the laws for the collection of the revenue, which will be shipping.] There are many statutory regulations to which he must attend, in the laws for the collection of the revenue, which will be shipped shipping. Warrious heads of Customs, Shipping, Warriousne, Case Wen. and in the act for consolidating the laws relating to merchant-seamen (5 & 6 Wm. IV. c. 19), which will be found under the head of Seamen.—(Holt on Shipping, 215-258. Abbot on Shipping, 6th edition by Shee, 102-160.)

MASTER AND SERVANT. The more important of the legal principles con-

MASTER AND SERVANT. The more important of the legal principles connected with this head, and coming within the scope of the present work, refer to the relations, obligations, and responsibilities of the parties in their transactions with the public. These will be presented under the head of Principal and Agent; and it only remains to give here a brief view of the nature of the engagement and the manner in which it is incurred, and the more usual remedies which parties may adopt when they feel aggrieved. The contract need not be in writing, unless it be intended to last longer than a year. In the case of clerks, warehousemen, shopmen, and in general all classes of persons who are in the way of being employed as permanent members of an establishment, a hiring without condition is a hiring for a year, and to make it terminable at a shorter period, there must be some specialty in the agreement, to show that the parties intended it to be for a shorter time. "By the general understanding on the subject, and without an express agreement or understanding to the contrary, domestic or menial servants, though hired by the year, are subject to be dismissed or to depart at any time on a month's notice given by either, or a month's pay by the master "(Burn's Jussice, Servants, ii.). This doctrine applies to England; in Scotland, the matter is regulated by local usage. A general hiring at so much per month, or so much per week, is a monthly or weekly hiring; but it is open to proof that the hiring was intended to be for a longer period, and that the expression was merely employed in rating the wages. In the case of such hiring by the year, or other consuetudinary period, if the servant continue in his employment after its expiry, the parties are held to have contracted with each other again for a like period.

other consustationary period, it the servant continue in his employment after its expiry, the parties are held to have contracted with each other again for a like period. Statutory Provisions.—There are several statutory provisions for regulating the intercourse between employers and employed, the more important of which only can be here briefly noticed. The 4th Geo. IV. c. 34, applies to the case of farm-servants, artificers, calco-printers, handicraftzmen, miners, colliers, keelmen, pitmen, glassmen, potters, and other labourers. In the circumstances of any such person refusing—if hired by a signed written contract—to commence, or (westher there be writing or not) descrites his service, or committing any misconduct, the hirer or his steward may complain on cath to a justice, who, on investigation, may abate the workman's wages, or imprison him for a period not exceeding three months, or discharge him. To facilitate the recovery of the wages of such workmen in case of the non-residence of their employers, justices, on their complaint, may summon the steward or foreman, award the wages (provided they do not exceed £10), and on non-payment within 2l days, levy the sum by distress and sale.

Truck System.—The act for abolishing the truck system (1 & 2 Wm. IV. c. 37) applies to miners, quarriers, saltimakers, brickmakers, cutlers and other workers of metals, japanners, tanners, and hemp, woollen, cotton, and silk manufacturers. It renders void all contracts where the engagement is not to pay in the current coin, or where there is a stipulation as to how the wages are to be spent. It is illegal to remunerate the artificers with goods, and these cannot be set off against his claim for full wages. Any employer transgressing is liable to a penality—vis. For the first offence, not less than £5 or more than £10; for the second, not less than £10 or more than £30; and for the third, not exceeding £100.

Aroticularion.—Disputes between a master and workman may be referred by any writing under their hands to the final and

ahawis, pullicat, roomal and other handkerchiefs, and the number to be contained in a piece; and, 6th, Disputes arising from the particular trade or manufacture, or relative contracts, which cannot be otherwise settled. 5 Geo. IV. c. 96.
[Factors Painterpla and Adent. Supprise.] (Acts as quoted. Burn's Justice. Smith's Mercantile L. 356-356. Burton's Manual of the Law of Scotland, 475-472.)

MASTIC (Arab. Arab. Fr. Mastic. Ger. Mastic. It. Mastice), a resinous exudation from the Pistacia lentisous, a shrubby tree found chiefly in the island of Scio, of which indeed it is the most celebrated production. When good, it occurs in pale yellow, brittle, transparent drops, of an astringent taste, and light agreeable odour, especially when heated. Such as inclines to black, greem, or is dirty, should be avoided. "It forms the basis of several dyeing varnishes, is one of the ingredients used in fumigations, and is considered to be efficacious in promoting a heatity state of the mouth: for this latter purpose it is held in much extern by ingredients used in fumigations, and is considered to be emicacious in promoting a healthy state of the mouth: for this latter purpose it is held in much esteem by the Turks, Greeks, and all the people of the Levant, who constantly chew it. The women of Scio, Smyrna, and Constantinople, have almost always a piece of it in their mouths. — (Lib. of Ent. Knowledge: Veg. Substances, vol. iii. p. 422.) Upwards of 300 cwts. are annually imported for consumption.

wards of 300 cwis. are annually imported for consumption.

MAT, MATTING (Fr. Nattes. Ger. Matten. Rus. Progoshki), a texture formed of rushes or the bark of trees interwoven, and used for coarse floor-covering, for packages, and other purposes. Mats are imported from various countries, but chiefly from Russia, where a kind called bast mats are manufactured on a large scale from the inner bark of the lime-tree. The matting bags in which sugar is imported from Mauritius have of late years been also much in request; they are made of the leaves of a tree called in that island the racoa. Floor and table mats made from vattans and rushes are likewise occasionally brought from China. made from rattans and rushes are likewise occasionally brought from China

MATE, the deputy of the master in a merchant ship. The first mate of every vessel exceeding 80 tons in burthen, and the first and second mate of every vess exceeding 300 tons, when regularly entered as such, are exempt from impressment (4 Geo. IV. c. 25, § 7). [Seamen.]

MATE, YERBA, OR PARAGUAY TEA, the leaves of an evergreen, shrubby plant (*Ilex Paraguayensis*), largely consumed in the manner of tea in many parts of South America, where they are the subject of an extensive commerce.

of South America, where they are the subject of an extensive commerce.

The plant grows wild in all the woods bordering the affluents of the Uraguay and Parana, as well as those of the Paraguay from the east, from lat. 24° 30' northward. The leaves are first slightly scorched, by drawing the branch itself through fire; they are then roasted, broken down, and packed under strong pressure. The custom of using this herb was derived by the Spaniards from the Indians of Maracaya; and it is now general in Paraguay, and even in Chilli, Peru, and Quito. A pinch of the leaves is put into a small cup of warm water, and the infusion is imbibed through a little tube pierced with small holes in the lower part, which only allow the passage of the water, and keep back the leaves. The same leaves serve for three infusions. Some drink it with sugar or lemon-juice, and it is taken at all times. [Paraguay.]

MAUND. an eastern weight, much used in INDIA.

MAUND, an eastern weight, much used in India.

MAUNDY MONEY, a name given to certain small silver coins distributed by the Queen as alms on Maundy Thursday. [Coin.]

MAURITIUS, on ISLE OF FRANCE, a British colony in the Indian Sea, about 600 miles E. of Madagascar. Discovered by Portuguese, 1805. Possession taken by Dutch, 1898. Abandoned by Dutch and colonised by French, 1715. Became subject to British 1810. Area 676 so miles. Population (1839), 1810. came subject to Britain, 1810. Area, 676 sq. miles. Population (1839), 135,197, mostly negroes, but including about 9000 whites, chiefly of French extraction, and 12,000 Indians. The administration is vested in a governor and council. S

12,000 Indians. The administration is vested in a governor and council. S

The island is in general mountainous, the land rising from the coast towards the centre; and a considerable portion of the interior is composed of an extended table-land. The climate on the elevated plains is very moist, but on the whole the island is salubrious, and indeed is visited on this account by invalids from India. The chief disadvantage under which it labours is its great exposure to hurricanes. These occur mostly between December and May, a period corresponding nearly with the rainy season. Mauritius is not generally a fertile island, and it is dependent for provisions on India, the Cape, and other places; but in some parts the soil is exceedingly rich, and tropical commodities are produced in great abundance. The spices of Ceylon have been introduced, but not with much success; and since 1825, when the importation of the produce of the island into Britain was allowed on the same footing as the West India colonies, the planters have given nearly their exclusive attention to the sugar-cape, the cultivation of which has since been very greatly extended, though it is now supposed to have attained its maximum. In the year 1839, there were under crop 70,292 acres sugar-cane, 3145 mains, 6533 mandioc, 1833 potatoes, 385 coffee, 76 cloves, and 5 nutnegs; and there were exported of staples, 661,239 cwts. sugar, 60,338 gallons rum, and 212,639 gallons molasses.

Mauritius is favourably situated for trade; and the last published accounts, those for 1837, state the amount of imports at £1,034,242: of which, from Britain, £344,739, chiefly cotton manufactures, machinery, mill-work, and carriages, metals, dried provisions, and ale; from Britain lindia, £361,235, mostly rice and corn; from France, £122,661, comprehending wines, live-stock, spirits, silks, cabinet waves, &c.; from Pondicherry, £79,872, chiefly cotton plees goods, rice, soap, candles, and akins; the chief other imports were corn, provisions, and live-stock, from the Cape,

£70,790; Hve-stock, rice, &c. from Madagascar, £58,633; bags, skins, and French goods, from Bourbon, £38,890; besides articles of smaller amount from Australia, Java, &c., and of oil from the fisheries. The exports in the same year, consisting almost wholly of the island staples, amounted to £331,132; of which, to British £63,797; Australia, £79,940; Edge, £44,767; Bourbon, £20,155; Madagascar, £15,716; British India, £13,965; Pondicherry, £7581; France, £335; besides smaller amounts to Java and other places.

There are two ports; Port Louis, the capital, in lat. 20° 10′ S., long. 57° 29′ E., pop. 26,000, lies in the N.W. extremity, within a marrow inlet; and Mahéboury, on the S.E. coast: the harbours of both are good, and safe, except in the hurricane seasons. From 100,000 to 120,000 tons of shipping enter annually.

MEASURES, MONEY, DUTIES, &c.

Measures and Weights.—The Imperial measures and weights are employed in government transactions, but the old system of France is that in ordinary use. The common practice is same value as the Spanish dollar. Private bills that in ordinary use. The common practice, and so weits: 1 French feet = 16 Brit. feet; 7 annes = 9 Brit. yards; 1 arpent = 1 Brit. ares, 7 perches; 1 velt = 2 old English wine gallons, and 30 veits = 1 cask; the quintal of 100 lbs. around a succession of the colonial produce of and 30 quintals = 1 French ton.

Money.—Accounts are kept in sterling; also in dollars of 100 cents of 100 cen

MEAD on METHLEGIN, a liquor of ancient use in Britain, prepared by fermenting honey and water with a small quantity of spices and ground malt.

MEASURES are, in commerce, of two kinds: those which have reference to geometrical qualities, or the attributes which belong to extension; and those which have regard to the physical quality of gravity, or weight. But as all the physical properties of matter have an inseparable connexion with extension, the unit of the properties of matter have an inseparative connection with extension, the unit of the measures of length may be held as the elementary foundation of both: its square affords the unit of the measures of surface, and its cube the unit of the measures of capacity; while from this last may be derived the unit of the measures of weight,—a vessel of any stated capacity filled with water, or any other homogeneous fluid, always weighing the same in the same latitude.

Standards are those measures of public or acknowledged authority by which others are adjusted. The importance of accurate standards has always rendered others are adjusted. The importance of accurate standards has always rendered their adjustment and preservation objects of the highest interest. Until of late years, however, none of those in use could be considered as strictly invariable, in consequence of the artificial bases on which they were established, and their tendency, as material substances, to gradual decay. But in several countries, the continued accuracy of the standards is now secured by their relation being fixed to some unchangeable object of nature. The objects preferred for this purpose have been, 1st, The length of a portion of the meridional circle; and, 2d, The length of a pendulum vibrating seconds of mean time. The first was adopted by the French in the wear 1795, when the metre, which is the foundation of their present system a pendulum vibrating seconds of mean time. The first was adopted by the French in the year 1795, when the metre, which is the foundation of their present system of measures, was fixed at the ten-millionth part of the quadrant of the meridian, or 39°37079 inches; and the second was so far adopted by the British government on the introduction of the Imperial system, that the length of the standard yard, as compared with that of a pendulum vibrating seconds in the lattice of London (at 62° Fahrenheit, and in a vacuum at the level of the sea), is determined to be in the proportion of 36 inches to 39°1393 inches.*

^{*} Since the above was written, a Report (December 21, 1841) has appeared from Mesers Alry, Baily, Bethune, Herschel, and other scientific commissioners appointed by government to consider the steps to be taken for restoration of the metrical standards which were destroyed in the burning of the Houses of Parliament in 1834. From this report it appears that the use of the natural constants referred to in the text will not reproduce the values of the original standards without sensible error; and that in future it will be best to adopt a certain brass rod, and a certain brass weight, as the standards of extension and weight, respectively; which, with four parliamentary copies, the commissioners recommend should be fabricated from the best existing copies of the former standards, and pisced securely in public repositories. They at the same time suggest, that the avoirdupois pound should be assumed as the unit of weight; and that the troy pound, the avoirdupois weights above 10 lbs. (as the stone, hundresdweight, &c.), and the avoirdupois dram, should be abolished, and other weights in the ascending decimal scale of troy ounces and avoirdupois pounds, and in the descending decimal scale from the avoirdupois pounds, should be substituted in their place. Other moderate changes of a systematic kind are recommended, particularly with the view of introducing the decimal scale—as a milyard, or mile of 1800 yards, a log gallon measure, and the more complete incorporation of the land-chain and its decimal multiples and divisions, with both our measures of length and of surface. The commissioners likewise direct public attention to the advantage of a decimal system of coinage. [Mongy.]

MEA

The Imperial measures were introduced by the act 5 Geo. IV. c. 74 (1824), and came into operation on January 1, 1826. This law, however, failed to produce a satisfactory uniformity in practice; and it was not until after the abolition of the heaped measures, and the introduction of the regulations of the act 5 & 6 Wm. IV c. 63 (September 9, 1835), that they were generally adopted. In the Imperial system, the legal measures of extension and weight are continued as before; but a new measure of capacity is substituted for a variety of corn, wine, and beer measures, previously in use throughout the kingdom. The standards fixed were as follows:—The "Imperial standard yard," or brass "standard yard of 1760," bearing the proportion to the pendulum already mentioned. The "Imperial standard gallon," containing 10 lbs. avoirdupois, or 277-274 cubic inches of distilled water at 62° Fahrenheit, the barometer being at 30 inches. The old troy pound of 1758, containing 5760 grains; one cubic inch of distilled water at 62° Fahrenheit, the barometer being at 30 inches, weighing 252 458 of such grains; and 7000 of such grains are declared to be equivalent to the avoirdupois pound. The chief other provisions in the act are the following:—

Weights and measures must be duly stamped by the inspectors, after being compared with the copies; and those using them either not stamped, or found light or unjust, forfeit a sum not exceeding £5, with the weights or measures, and the contract is annulled. No weight above 56 lbs., or wooden or wicker measure used in the sale of lime, or glass or ear-henware drinking-vessel, requires to be stamped; but any person, buying by any such measure represented as of any amount of imperial measure, may require the same to be tested by a stamped measure, and if the seller refuse to do so, or the measure is found deficient, he becomes liable to the above penalty. Weights made of pewter or lead cannot be stamped or used unless cased with brass, copper, or iron. Weights of 1 lb. or more must have the number of pounds, and measures must have their contents, denominated in legible figures and letters.

Justices and magistrates, or any inspector authorised by them in writing, may, at all seasonable times, enter any shop, warehouse, or other place, within their jurisdiction, where goods are sold or weighed, and examine the weights, weighing-machines, and measures used there; and on any of these being found likely for fraudulent, or their not being produced, or the investigation being obstructed, parties become liable in a penalty not exceeding £5.

Local and customary measures, including the Winchester bushel and Scotch ell, abolished, and not to be used under a penalty not exceeding 40s.; but any vessel not represented as containing any imperial, fixed, or customary measures, neady be weight in the sale of articles.

The use of the heaped measure is prohibited; and coal, slack, culm, or camel, must be sold by weight. All articles sold by weight must be sold by avoirdupols weight, except gold, silver, platina, diamonds or other precious stones, which may be sold by troy weight; and drugs, which, when sold by retail, may be sold by apothecaries' weight. A stone-weight is to consist of fourteen pounds avoirdupols. The flar prices

for every copy.

BRITISH MEASURES ACCORDING TO THE IMPERIAL STANDARDS, WITH THEIR EQUIVALENTS IN THE METRICAL SYSTEM OF FRANCE.

I. Maa	Sures of Length.	Metres.
12 inches	= 1 foot.	0.30479
3 feet	= 1 yard.	0.91438
54 yards	= 1 pole, rod, or	
-	perch.	5-02911
40 poles	= 1 furlong.	901-16436
8 furlongs	P	
1760 yar	is = 1 mile.	1609-31492
Special 1	Leasures of Length.	The hand =
4 inches; t	he pace = 5 feet; and	the fathom =
6 feet. The	geographical degree	= 20 nautical
leagues, or	69-121 miles. In land	measure, the
chain of 100	links = 66 feet.	•

II. MEASURES OF SURFACE.

144 square inches 9 square feet 302 sq. yards, or	= 1 sq. foot. = 1 sq. yard.	Ares. 0-000929 0-006361
2722 sq. feet	- 1 eg. pole.	0-252919
40 square poles	= 1 sq. pole. = 1 rood.	10-116775
4 roods, or 4840		
square yards		40-467102

III. MEASURES OF CAPACITY.

1. General Measure of Solidity.

1728 cubic inches = 1 cubic foot, 27 cubic feet = 1 cubic yard.	Cuh. Metre. 0-028315 0-764513
The ton measurement for shippi barrel-bulk, or 40 cubic feet.	ng contains 8

2. Measures for Liquids and Corn.*

8-665 cubic inches	_	1	oill.	Litres. 0-142
4 gilis			pint.	0-568
2 pints			quart.	1.136
4 quarts			gallon.	4-543
2 gallons	=	1	peck.	9-087
4 pecks	=	1	bushel.	36-348
8 bushels			quarter.	
10 anastass	_	1	lo at	9007-818

The measures higher than the gallon are not

40 square poles = 1 rood.
40 square poles = 1 rood.
4 roods, or 4840
square yards = 1 acre.
40-467102
The acre also contains 10 square chains; and 640 acres make 1 sq. mile, equal 266-989 hectares.

The acre also contains 10 square chains; and the bogshead I is barrel or 56 galls.; and the bogshead I is barrel contains 4 firkins or 35 galls.; and the bogshead I is barrel entered in the bogshead I is barrel and its square chains; and the bogshead I is barrel entered in the bogshead I is barrel entered in the square poles.

The measures nigner than the gallon are not square poles.

In Best Measure, the barrel contains 4 firkins or 35 galls; and the bogshead I is barrel entered in the barrel entere

^{*} In Ireland, grain is commonly sold by weight; a practice which is also followed in Liverpool, except in sales of malt and barley for maiting purposes. In the latter place, wheat is sold by the 70 lbs.; and barley for grinding by the 60 lbs. weight. [Corm.]

as the butt, pipe, and others specified below; but these are now to be considered rather as the names of casks than as expressing any definite number of gallons. The standard gauges recog-nised in trade are described in the article Wins.

IV. MEASURES OF WEIGHT.

1. Analydynais or Commercial Weight.

27:34 troy grains = 1 dram.	Kilogrammes 0-0018
16 drams = 1 ounce.	0-0283
16 ounces, or 7000 grains = 1 pound.	0-4535
14 pounds = 1 stone.	6:3496
28 pounds = 1 quarter.	12-6992
4 quarters, or 112 pounds = 1 hundred-	
weight.	50-7969
20 hundredwgts. or 2240 pounds = 1 ton.	1015-9388

Flour Weight.—1 peck = 14 pounds; 1 boll = 140 pounds; 1 mck = 280 pounds, or 2½ hundredweight; 1 barrel = 19.; pounds.

2. Troy, or Gold and Silver Weight.

94 grains = 1 pennywgt. 20 pennyweights = 1 ounce. 12 ounces, or ounces, or 5760 grains = 1 pound.

373-202 The troy pound is less than the avoirdupois in the groportion of 14 to 17 nearly; but the troy ounce is greater than the avoirdupois in the pro-

81-100

ounce I greater than the avoirdupois in the proportion of 79 to 72 nearly.

The mode of expressing the fineness of gold and silver is explained in the articles Corrand PLATE.

Diamonds are weighed by carata, 1514 of which make one ounce troy; the carat is therefore equal to 3½ troy grains.

Pearl Weight.—The troy ounce contains 600 pearl grains, and hence one pearl grain is \$ths of a troy grain.

Apothecories' Weight.—20 troy grains make 1 scruple, 3 scruples make 1 dram, and 8 drams make 1 troy ounce. This weight is used in medical prescriptions only.

Tables for the mutual Conversion of the British and French Measures.*

Mo- tres.	Yards.	Hoo- tures.	Acres	Litres.	Imperial gallens.	Heoto- litres.	Imperial quarters.	Grammer.	Troy grains.	Kilo- ramme.	Lha, avoird
1	1-09363	1	9-47114	1	0-22010	1	0.34390	1	15-434	1	2-20486
2	2-18727	2	4-94229	2	0-44019	8	0-68780	2	30-868	2	4.40971
3	3-28090	8	7.41343	3	0-66029	3	1-03170		46:302	3	6-61457
14	4.37453	4	9-88457	4	0-88039	4	1.37560	1 4	61-736	4	8-81943
	5-46817	5	12-35572	5	1.10048	8	1.71950	5	77:170	5	11-02429
6	6-56180	6	14-82686	6	1.32058	6	2-06341	6	92-604	6	13-22914
7	7-65543	7	17-29600	7	1.54068	7	2-40731	7	108-038	7	15.43400
8	8.74906	8	19-76914	l 8	1.76077	8	2-75121	8	123-472	8	17:63886
9	9.84270	9	22-24029	9	1-98087	9	3-09511	9	138-906	9	19-84371
Yarda.	Metres.	Acres.	Hootares.	Jup. galla.	Litres.	imp. qrs.	Hosto- litres.	Troy grains.	Orannes.	Lba. avoird.	Kilo- grammes.
1	0-91438	1	0-40467	1	4-54346	1	2-90781	1	0-06479	1	0-45354
2	1.82877	2	0.80934	8	9-08699	8	5-81563	9	0.12958	9	0-90709
	274315	3	1.21401	3	13-63038	3	8-72344	3	0.19438	3	1.36063
4	3-65753	4	1-61868	4	18-17384	4	11-63126	4	0-25917	4	1-81418
5	4.57192	5	2-02336	5	22-71730	5	14-53907	5	0.32396	5	2-96772
6	5.48630	6	2-42803		27-26076		17-14689		0.38875	6	2-72126
7	6-40068	7	2.83270		31.80422		20-35470	7	0.45354	7	3-17481
8	7.31507	8	3.23737		36-34768	8	23-26252	8	0.51834	8	3-62835
9	8-22945	9	3-64204	9	40-89114	9	26-17033	9	0-58313	9	4-08190

These tables are also equalization tables of prices, as well as of measures and weights, but in the inverse ratio of the latter. Thus, for example, 9 lbs. = 4 0819 kilogrammes; but when the price of a kilogramme = 9 francs or shillings, the price of a pound = 4 0819 francs or shillings; also 9 kilogrammes = 19 84371 lbs; but when the price of 1 lb. = 9 francs or shillings, the price of 1 kilogramme = 19 84371 francs or shillings.—(Fide note on p. 472.)

PRINCIPAL OLD MEASURES SUPERSEDED BY THE IMPERIAL SYSTEM.

^{*} The elementary equations used in the comparison of the French and British measures are as follow:—For extension, the metre = 39-37/79; for weight, the kilogramme = 15434 troy grains. The former is stated on the authority of the second Report of the Parliamentary Commission on British Weights and Measures, and of the Annuaire of the French Board of Longitude; the latter according to the London Mint Report on attested Standards, sent to Lord Castlereagu, by D. R. Morier, Esq., Consul-general at Paris, 1820.

stones Dutch, or 139-135 lbs. avoird.; but usually reckoned 140 lbs. in consequence of the Dutch or Lanark stone being estimated at 172 lbs. avoird.

bushels made a suck, 19 sucks a chaldron, and 21 chaldrons a score. This measure was used for roads, culm, lime, fish, potatoes, and other commodities. Apples and pears were commonly sold by the Winchester bushel heaped.

Winchester or Bagitia Standard Corn Measure.—The denominations of this measure was sold.

Winchester or Bagitia Standard Corn Measure.—The denominations of this measure was found through the same as the Imperial. The Winchester bushel contained 3150-43 cubic inches; 33-237. French litres. The Imperial bushel contains \$213-192 cubic inches; hence I Winchester bushel contained \$150-43 cubic inches; bester jushel or quarter equal 1-031516 Winchester equal 1-040-44 Timp. bushel or quarter equal 1-031516 Winchester bushels or quarter equal 1-031516 Winchester bushels or quarter equal 33 Imperial mehre.

SCOTLAND.

Measures of Surface.—35 and to convert imperial price in Imperial acres. Hence Scots acres are convertible into Scots acres by multiplying by 134. On the other hand, Imperial acres are convertible into Scots acres by multiplying by 134. On the other hand, Imperial acres are convertible into Scots acres by multiplying by 134. On the other hand, Imperial acres are convertible into Scots acres by multiplying by 134. and dividing the product by 169. Similarly to convert prices of land per Scotch measure into prices per Imperial prices into fortain measure, was equal to 34 cits, or more nearly 4. 14d. per £1 from the Scots acres are convertible into Scots acres by multiply the former by 1-261183; or approximately add 4th, or more nearly 4. 14d. per £1 from the Scots acres into Imperial acres are convertible into Scots acres by 169. Similarly to convert imperial prices into fortain measure, was equal to 34 cits, or more nearly 4. 14d. per £1 from the Scots acres of land per Scotch measure into prices per Imperial price. Corn Measurer.—See the article Boll.

Corn Measurer.—See the article Boll.

Corn Measures .- See the article BOLL.

-00806 -01209

TRELAND. 100 Irish gallons = 781 Imp. gallons 11 Irish miles = 14 Imp. miles. 121 Irish Plantation acres = 196 Imp. acres. 94 Cunningham = 31 Imp. acres nearly. acres.

Reciprocal Conversion of Winchester and Imperial Measures."

Winchester into Imperial.						Imperial into Winchester.						
Win. Qra	Imperial Guartera	Win. Bash.	Imperial Quarters	Win. Pools.	Imperial Quarters.	Imp. Gra.	Winehester Quarters.	Imp. Besh.	Winehester Quarters	Imp. Pecks	Wischester Quarters.	
1	0-969447	1	0-191181	1	-03030	1	1-031516	1	0-128939	1	03223	
2	1-936894	2	0-942362	8	-06659	2	2-063031	8	0-257879	2	-06447	
8	9-908341	3	0-363543	8	-09089	3	3-094547	3	0-396818	3	-09670	
4	3-877798	4	0-484723	Gala.	1	4	4-196063	4	0-515788	Cal		
5	4-847235	5	0.605904	1	-01515	. 5	5-157579	8	0-644697	1	-01612	
6	5-816682	6	0-727085	Quarts.	1	6	6-189094	6	0.773637	Qte		
7	6-786129	7	0-848266	⁻ 1	-00379	7	7-2206 10	7	0.902576	1	-00403	
8	7755576	8	0-969447	8	-00757	8	8-252126	8	1-031516	2	-00806	
9	8-795093	9	1-090628	3	-01136	9	9-283641	9	1-160455	3	-01209	

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As the Winchester and Imperial quarters are similarly divided, the first two columns in the ight-hand Table will also serve for the conversion of Winchester bushels, pecks, gallons, and quarts respectively, into the same denominations in Imperial; while the inverse operation may be serformed by means of the first two columns in the left-hand Table.

Reciprocal Conversion of Prices per Winchester and Imperial Measures.

	Winchester into Imperial.						Impe	rial int	o Wincheste	т,	
Win. 1 2 3 4 6 7 8 9 10	Importal. a. d. 1 0½ 2 0½ 3 1½ 4 1½ 5 2 6 2½ 7 2½ 8 3 9 3½ 15 5½	Wia. 20 25 30 38 40 50 60 76 80 90 100	Importal. 30 7½ 95 9½ 50 11½ 36 1½ 41 34 51 7 61 10½ 72 2½ 82 6½ 82 6½ 103 14	Win. 1 2 3 4 5 6 7 8 9 10 11	1 2 3 44 54 64 74 84 114	Imp. 1 9 3 4 5 6 7 8 9 10 16	Winehester. d. 0 112 1 114 2 11 3 101 4 102 5 92 6 92 7 9 8 82 9 84 14 63	Imp. 8: 20 25 30 35 40 60 70 80 90 100	Windhester. 19 4½ 29 2½ 29 1 33 11½ 38 9½ 48 5½ 58 2 67 10½ 77 6½ 87 3 96 11½	1 2 3 4 5 6 7 8 9 10 11	Win. d. 1 2 3 4 4 4 4 5 5 6 6 7 1 8 5 9 9 1 1 0 5

^{*} These tables being expressed decimally, we have deemed it unnecessary to go higher than the nine digits, as the others can readily be obtained from them, merely by transposition of the decimal point, and addition. Thus, as 9 Winchester qrs. = 8723023 Imperial qrs.; 90 Winchester qrs. = 8723023 Imp qrs., and adding these respective quantities, we have 99 Winchester qrs. = 96-975553 Imp qrs. [DECIMAL FRACTIONS.]

Table for Converting Scots Land Measure into Imperial; and also for Converting Prices per Scots Measure into Prices per Imperial Measure.

Scots into Imperial Land Measure.							Conver	don of	Prices.		
Scots	Imperial acre.	Scote fall	Imperial	Hoots ell.	Imperial acre.	Soots.	Imperial.	Scots.	Imperial.	Scote.	lmp.
7	0-3152959	1 T	-00788	ï	00022	ï	0 15 101	ī	0 94	1 1	ői
1	0.6305917	9	-01576	9	-00044	2	1 11 81	9	1 7	ll ī	04
Ē,	0-9458876	š	02365	li š	-00066	3	2 7 64	3	9 44	عَ ا	Ĭ
i !	1-2611834	4	-03153	4	-00088	4	3 3 5	4	3 2	š	2
2 !	2.5223669	5	-03941	5	-00109	5	3 19 31	1 8	3 114	Ā	3
3	3 7835503	6	-04729	6	·00131	6	4 15 14	6	4 9	5	34
4	5.0447338	7 1	-05518	7	-00163	7	5 11 0	7	5 61	6	44
5	6:3059172	8	-06306	8	-00175	8	6 6 102	8	6 4	1 7	8
6	7.5671007	9	-07094	9	-00197	9	7 2 84	9	7 14	18	62
7	8-8282841	10	-07889	10	-00219	10	7 18 64	10	7 11	9	7
8	10-0894676	20	15765	20	-00438	20	15 17 9	11	8 84	10	72
9	11.3506510	130 I	-23647	30	-00657	30	23 15 9	15	11 104	ii l	84

The first two columns will answer likewise for converting Scots roods into Imperial roods, and Scots falls into Imperial poles or perches. The table for the conversion of prices shows the equivalents per Imperial acre, rood, or perch, of the given rates per Scottish acre, rood, or fall, respectively.

falls into Imperial poles or perches. The table for the conversion of prices shows the equivalents per Imperial acre, rood, or perch, of the given rates per Scottish acre, rood, or fall, respectively.

MEASURES AND DIVISIONS OF TIME. The principal measures of time are those furnished by nature in the rotation of the earth on its axis, the revolution of the moon round the earth, and the revolution of the earth round the sun,—periods respectively denoted by the terms Day, Month, and Year. For ordinary purposes, however, these are reckoned by approximate or conventional methods. The Civil Day is the mean solar day. The Lunar Month is, except in Eastern countries, superseded by the Kalendar Month. The Civil Year, or mean solar year, was adjusted by Julius Casar (a. c. 45), who, estimating the solar revolution at 365 days 6 hours, fixed that the year should consist of 365 days in three successive years, and 366 in the fourth, called leap year. This method, denominated Old Style, was adopted and continued by all Christian nations until a. D. 1832, when it was discovered that the Julian year was too long by about 11 minutes,—the true length of the solar year being 365 days, 5 hours, 49 minutes nearly. To rectify this error, which had then led to an advance of about 10 days, Pope Gregory XIII. ordained that the year 1582 should consist of 355 days only; and, to prevent a like irregularity in future, it was decreed that when a number denoting a complete century is not divisible by 4, as the 17th, 18th, and 19th, such years should be reckoned as common years,—an arrangement involving an excess of but one day in 5200 years. The Gregorian Kalendar, or New Style, was gradually adopted in all Christian countries, except those which acknowledge the Greek Church,—Russia and Greece. In Britain, it was adopted in 1752, when the difference of time being 11 days, it was enacted that the 3d of September of that year should be called the 14th. During the present century, the Old Style is to be reckoned 12 days later than the New Sty

rian Kalendar is used.

The REGNAL YEARS OF SOVEREIGNS are commonly used in dating public documents. In the following table the periods when the sovereigns began to reign are stated on the authority of Sir Harris Nicolas' "Chronology of History."

ENGLISH SOVEREIGNS FROM THE CONQUEST.

Names.	Began to Reign.	Names.	Began to Reign.	Names.	Began to Reign.
William I. (the				Jan. 30, 1649, to	
				the restoration of	İ
Wm. II. (Rufus)	1067 Sept. 36,	Edward IV	1461 Mar. 4		i
Henry L (Beau-		Edward V	1483 April 9	Charles IL (resto-	
clerc)	1100 Aug. 5	Richard III	1483 June 26	red*)	1660 May 20
Stephen					
Henry IL	1154 Dec. 19	Henry VIII	1509 April 22	Wm. (III.) & Mary	1689 Feb. 13
Richard I	1189 Sept. 3	Edward VL	1547 Jan. 28	William III. alone	1694 Dec. 28
John					
Henry III	1216 Oct. 28	Elizabeth	1558 Nov. 17	George L	1714 Aug. 1
Edward I	1272 Nov. 20	James I	1603 Mar. 24	George II	1727 June 11
Edward II	1307 July 8	Charles L	1625 Mar. 27	George III	1760 Oct. 25
Edward III				George IV	
Richard II	1377 June 22	from the execu-		William IV	
Henry IV				Victoria	1837 June 20

^{*} In some historical, and in all legal documents, the reign of Charles II. is reckoned from the death of his father. Charles I.

The Terms recognised in the different divisions of the United Kingdom for leases and money-payments are as follow:—

In England and Ireland: Lady Day, March 25; Midsummer, June 24; Michaelmas Day, September 29; and Christmas, December 25. In Scotland: Candlemas, February 3; Whitsunday, May 15; Lammas, August 1; and Martinmas, November 11. When any of these falls on Sunday, the following Monday is considered to be the Term Day.

GENERAL KALENDAR FROM 1798 TO 1899.

Use.—To find the day of the week answering to May 4, 1840.—Above 1840 in the left-hand table, is found the Dominical or Sunday Letter D; and over D, contiguous to May, in the right-hand table, is the figure 3, the date of Sunday; the 4th, the day of the month corresponding to the day of the week, is too evident to require illustration.

The months January and February, it will be observed, are to be referred to separately in leap years: such years may be known by a blank space always preceding them in the left-hand table.

years: such years may be known by a blank space always preceding them in the left-hand table. The MOHAMMEDAN KALENDAR dates from the flight of the prophet from Mecca to Medina, which, according to the civil calculation, occurred on July 16, a. D. 6:22, hence called the epoch of the era of the Hegira. The years of the Hegira are lunar years, and contain 12 lunar months, each commencing with the new moon; a practice which leads to great confusion, as each lunar month retrogrades through all the different seasons in nearly 32; solar years. The months consist, like ours, of weeks, each day of which begins in the evening after sunset. As the lunar year consists of 354 days and 11-30ths of a day, a fraction which, in the course of 30 years, amounts to 11 days; the years of the Hegira are divided into cycles of 30 years; 19 of which are termed common years of 354 days each, and the 11 others intercalary, or abounding years, from their consisting of one day more: these are the 2d, 5th, 7th, 10th, 18th, 16th, 18th, 21st, 24th, 26th, and 29th. To ascertain whether any given year be intercalary or not, divide it by 30; and if any of the above numbers remain, the year is one of 355 days. In chronology, history, and public documents, the Turks use months which contain alternately 30 and 29 days, except the last month, which in intercalary years contains 30 days. The names of except the last month, which in intercalary years contains 30 days. The names of these months, with the length of each, are as follow:—Moharram, 30; Saphar, 29; Rabia I. 30; Rabia II. 29; Guimadhi I. 30; Guimadhi II. 29; Redgeb, 30; Schaban, 29; Ramadhan, 30; Schoual, 29; Dhu'l Kadah, 30; Dhu'l Hajjah, 29, and in intercalary wears 30 daws intercalary years 30 days.

The day on which any year of the Hegira begins will be ascertained with tolerable accuracy by the following calculations:—Multiply the years elapsed by 970203; cut off six decimals; add 622.54, and the sum will be the year of the Christian era, and decimal of the day following in old style. Again, to reduce the Christian era to the Mohammedan, subtract 622 from the current year; multiply by 1 0307; cut off four decimals, and add 46: the sum will be the year and decimal of the day,

old style.

The following table, derived from the splendid French work "L'Art de Vérifier les Dates," shows the day of the Christian kalendar on which each Mohammedan year begins, from A. D. 1840 to 1900; from which, and the preceding list of months, the general correspondence of dates may be easily determined.

Anno Ecg.	Ame Dec.		Anno Heg.	Апво Роза		Anne Heg.	Auno Dona		
1256*	1840	March 5	1277	1860	July 20	1298	1880	Dec.	4
1257	1841	Feb. 23	1278*	1861	July 9	1299	1881	Nov.	23
1258	1842	Feb. 12	1279	1863	June 29	1300*	1882	Nov.	12
1959*	1843	Feb. 1	1290	1863	June 18	1301	1883	Nov.	2
1260	1844	Jan. 22	1281*	1864	June 6	1302	1884	Oct.	21
1261	1845	Jan. 10	1989	1865	May 27	1303*	1885	Oct.	īö l
1262*	1845	Dec. 30	1283	1966	May 16	1304	1886	Sept.	30
1263	1846	Dec. 20	1284*	1967	May 5	1305	1887	Bept.	19
1264	1847	Dec. 9	1285	1868	April 24	1306*	1888	Sept.	-7
1265*	1848	Nov. 27	1286*	1869	April 13	1307	1889	Aug.	28
1266	1849	Nov. 17	1287	1870	April 3	1308*	1890	Aug.	17
1267*	1850	Nov. 6	1288	1871	March 23	1309	1891	Aug.	*4
1268	1851	Oct. 27	1289*	1872	March 11	1310	1892	July	26 I
1269	1882	Oct. 15	1290	1873	March 1	1311*	1893	July	16
1270*	1863	Oct. 4	1291	1874	Feb. 18	1319	1894	July	75
1271	1854	Sept. 24	1292*	1875	Feb. 7	1313	1895		24
			1293			1314*	1896	June	
1272	1855	Sept. 13		1876		1315		June	12
1273*	1856	Sept. 1	1294	1877	Jan. 16		1897	June	8
1274	1857	Aug. 22	1995*	1878	Jan. 5	1316*	1898	May	22
1275	1858	Aug. 11	1296	1878	Dec. 26	1317	1899	May	19
1276*	1859	July 31	1297*	1879	Dec. 15	1318	1900	May	. 1

* Intercalary or abounding years.

In scientific computations, the Mohammedans use the solar year; but always according to the Julian kalendar or old style.

MECKLENBURG-SCHWERIN, a grand-duchy lying in N. Germany, between the Baltic and the Elbe, contiguous to Prussia, Hanover, and the territory of Lu-bec. Area, 4788 sq. miles. Population, 494,530. Government, a constitutional monarchy.

monarchy.

The country is generally level and fertile; agriculture is the chief employment of the people; and the manufactures are inconsiderable, though some pains are bestowed on those of linen and woollen. The exports consist almost wholly of farm-produce; and, according to Mr Meek's report (Par-Paper, 1842; No. 7), they amounted, on an average of the 3 years 1839 481, to 305,639 quarters wheat; 72,674 qrs. rye; 56,243 qrs. barley; 29,655 qrs. cats; and 29,567 qrs. pease; besides 800,000 lbs. wood, mostly of fine quality, 1,550,000 lbs. bones, rapessed sake, hides, and other articles. The imports embrace most kinds of manufactures and tropical produce, salt, wine, tallow, hemp, &c. The foreign trade is conducted partly through Hamburg by the Elbe, but chiefly at the ports of Rostock and Wismar on the Baltic, and the principal intercourse is with England. The trade of the grand-duchy, however, is much checked by the vicinity of Hamburg and Lubec, and the heavy duties imposed by the Prussian tariff.

Rastock, the chief port and largest town, lies in lat. 54° b' N., long. 12° 20' E. on the river Warnow, about 9 miles from its mouth; pop. 18,200. In 1840, 702 vessels entered the port; and about 230 vessels, burthen 35,332 tons, belong to it.

Measures and Wrights.—At Rostock the ell | In the S. of Mecklenburz, Prussian monies and

about 230 vessels, burthen 35,332 tons, belong to Measures and Weights.—At Rostock the ell of 2 feet = 232 Brit. inches. The liquid measures are the same as in Lubec. The Rostock corn scheffel = 107 Brit. bushle. 100 Rostock lbs. = 112 lbs. avoird; but the weights, but the weights of the constant of the scheful used are those of Lubec and Hamburg. Money.—Accounts are stated in thalers or dollars of 46 schillings, each of 19 pfennings; also in marks of 16 schillings. The dollar = 3a.44d. The principal con is the Constitution 3 piece, which is estimated at 32 schillings. Foreign exchanges are transacted chiefly through the medium of Hamburg, the usual rate being 130 dollars for 300 marks banco.

MECK LEN BURG-STRELITZ.a gra

In the S. of Mecklenburg, Prussian monies and

In the 8. of Mecklenburg, Prussan momes and measures are common.

The Duties are levied according to a tariff published in Rostock in 1748, called the Accise Rolle; and at that port they average, including town duties, contributions, and bridge-money, about 3 per cent. Those on exports do not exceed this rate. The port charges at Rostock are very small, indeed lower than at any other place in the Baltic.

The Revenue is about £440,000, of which nearly £250,000 are produced by the domains. The debt is about £780,000.

MECKLENBURG-STRELITZ, a grand-duchy contiguous to the foregoing, with which indeed it is united by a compact called the Landes-Union, made in 1523. Area, 1092 sq. miles; pop. 89,528. Being situated at a distance from the ocean, and of small size, it possesses no commercial interest. [Germany.] MEDIDA, a Brazilian measure equal 41 Imp. pints nearly.

MEDIDAR, the fruit of the Mespilus Germanica, a native of the south of Europe, but cultivated, though to a small extent, in this country. It resembles the smaller apples and possesses considerable flavour, but does not attain the ripe-

smaller apples, and possesses considerable flavour, but does not attain the ripeness fit for use until some time after it has been taken from the tree. The Nottingham medlar is the finest, but the Dutch, a larger variety, is the kind most prized in England.

MEERSCHAUM, or earthy carbonate of magnesia, is a light substance, of a white or yellowish colour; soft when first dug, but hardens on exposure to the air. Principal localities, Samos, Negropont, Natolia, and Moravia. It is the material used in the manufacture of Turkish pipes, and is also employed as fuller's earth.

MERCANTILE SYSTEM, a theory of political economy, formerly in high repute, which was based on the principles that wealth consisted in gold and silver, and that those metals could be brought into a country that had no mines only by exporting to a greater amount than it imported. Its two great engines for enriching the country, therefore, were restraints upon importation, and encouragements to exportation. Importation was restrained by imposing prohibitions or high duties,—1st, Upon such foreign goods for home consumption as could be produced at home; and, 2d, Upon goods of almost all kinds from those particular countries with which the balance of trade was supposed to be disadvantageous. Exportation again was encouraged by—1st, Drawbacks; 2d, Bounties; 3d, Securing commercial privileges in some foreign state beyond what were granted to other countries; and, 4th, Monopolizing wholly or partially the trade of the colonies. The mercantile system was overthrown by Adam Smith, by whom it is discussed in the fourth book of the Wealth of Nations, to which we must refer for a full exposition of its fallacies. In the present work, further information will be found under the heads BALANCE OF TRADE, BOUNTY, COLONY, and COMMERCE.

MERCURY OR QUICKSILVER (Fr. Mercure. Ger. Quecksilber. Sp. Asogue), a brilliant silver-white metal, distinguished by being fluid at a natural temperature. Sp. gr. 13-57. It boils at 670°. At 40° below zero it becomes solid. When thrown on a table it collects into a globule, and, provided it is pure, runs without leaving a tail. Mercury is found native in small quantities; but for commercial purposes it is always extracted from the ore called cinnabar, a bisulphuret of the metal, found in Austria, Spain, Japan, China, and South America. The most productive mines are those of Almaden, near Cordova in Spain, which have been worked upwards of 2000 years; of Idria in Austria, and of Huancavelica in Peru. It occurs massive and crystallized, and of a red colour. Cinnabar is also prepared artificially by

Mercury is principally employed for amalgamation with other metals, chiefly gold and silver, so as to extract them from their ores. It is used also in gilding, in silvering mirrors, and for various philosophical instruments. In medicine it is employed in several forms. The whitish insipid powder termed calomel is the procedured of mercury; and the acrid nauseous white substance, known as corvoine sublimate, is the bichloride. The latter has of late been likewise extensively em-

sublimate, is the bichloride. The latter has of the been likewise extensively employed for the prevention of dry-rot. See Quicksilver, in Supplement. The imports of mercury into this country, almost wholly from Spain, amount annually to about 2,000,000 lbs.; of which about one-eighth only is entered for home consumption. The remainder is re-exported chiefly to Mexico and Chili; but in considerable quantities also to Guatemala, the United States, and East Indies; while smaller shipments are made to Russia, Germany, Belgium, and other places.

These is leather have. 4 lbs. each: in iron bottles, weighing 3 or a 8 lbs., 15 lbs. per bottle.

while smaller shipments are made to Russia, Germany, Belgium, and other places. Toves, in leather begs, 4 lbs. each; in iron bottles, weighing 3 qrs. 8 lbs., 15 lbs. per bottle. MERINO, a fine kind of woollen fabric. [WOOLLEN MANUFACTURES.]

METRE, the rudimentary unit of the metrical system of France, fixed at the ten-millionth part of the quadrant of the meridian, is equal 39 37079 inches. MEXICO, UNITED STATES OF, formerly the viceroyalty of New Spain, is now a federative republic, occupying the S. part of North America and N. part of Central America, betwixt 16° and 42° N. lat. It consists of 19 states, 5 territories, and a federal district, besides an extensive outlying tract. Area of the states, 833,600 sq. miles. Population of the whole, variously estimated at from 6,000,000 to 8,000,000, of which about one-half are Indian aborigines, 1,250,000 whites, and the remainder mixed races. Capital, Mexico, an inland city; pop. 140,000. The Congress of the union consists of a president, vice-president, and of two legislative bodies—the Senate and the House of Representatives.

About one-half of the surface of Mexico is situate within the tropics, while the rest belongs to

two legislative bodies—the Senate and the House of Representatives.

About one-half of the surface of Mexico is situate within the tropics, while the rest belongs to the temperate zone; but of the former more than three-fifths have a mild atmosphere, as nearly the whole interior is composed of an immense table-land of the mean height of 7000 feet, continuous with the Andes of S. America, and running from 18° to 40° N. latitude. In the course of this tract, however, detached mountains occur which rise into the region of perpetual snow. The table-land gradually declines towards the temperate zone; but the descent towards the coasts, especially the E. coast, is by a graduated series of terraces, which produce an attraordinary diversity of vegetation, and at same time oppose great difficulties to the communication between the maritime districts and the interior, rendering it difficult to transport merchalse, except on muleback. In the equinoctial region there are only two seasons,—the wet, from June or July to September or October, and the dry, which lasts eight months: in this district hidferent climates rise as it were one above another from the shore, where the mean temperature is about 78° Fahr., to the central plains, where it is about 62°. The coast is humid and unhealthy for strangers, but

the table-land is remarkable for its salubrity; most of the population of the country being concentrated upon the latter. The summit of the table-land is almost destitute of vegetation, owing to the absence of moisture; but muriste of sods and other saline substances exist in great abundance. The remaining districts are in general productive. Maise is the chief object of culture; besides which, the banana, manice, the ecreal grains, rice, and the potato, form the common food of the people. The Mexican wheat is of the finest quality, and would form a staple export, but for the difficulty of transporting it to the seacoast. The narrow insalubrious plain along the coast called the tierac calients, or not country, is remarkable for its luxuriant vegetation. The chief productions are the sugar-cane, cotton, cocoa, indigo, and tobacco. The southern part of the country, forming the isthmus, is celebrated for the variety and importance of its woods and medicinal plants,—including logwood, caoutchouc, vanilla, jalap, and storax, besides the tree which nourishes the cochineal insect. Vast herds of horses, mules, and horned cattle cover the plains of the northern states.

The mines of Mexico, however, constitute the chief source of its wealth, particularly those of silver, which indeed are by far the most valuable in the world. Gold is obtained, but only in small quantities. Copper, tin, iron, lead, and mercury, are also to befound. The gold is procured chiefly from river deposits by washing, particularly in the province of this metal are most common in Oxacca. The silver is mostly procured from veins, and the following is a list of the richest mines:—Guanaxuato, in state or province of that name; Catorce, in San Luis Potosi; Zacatecas, in province of that name; Read led Monte, near Mexico; Bolanos, in Kalisco; Guarisamey, in Durango; Sombrerete, in Zacatecas; Tasco, near Mexico; Bolanos, in Kalisco; Guarisamey, in Durango; Sombrerete, in Zacatecas; Ramos, in San Luis de Potosi; Parral, in Durango; According to Mr. Ward (

Curiapan, near Mexico; Tremillo, in Zacatecas; Ramos, in San Luis de Potosi; Parral, in Durango.

According to Mr Ward (Mexico in 1837, vol. il. p. 38), the annual average produce of the mines before the revolution in 1810 amounted to \$24,000,000 (£4,800,000), and the average apports to \$23,000,000 (£4,800,000) (£4,800,000), and the average exports to \$23,000,000 (£4,800,000), and the average exports to \$23,000,000 (£4,800,000) (£4,800,000), and the average exports to \$23,000,000 (£4,800,000), and the average exports to \$23,000,000 (£4,800,000). The mines in operation, caused a great falling off; and in 1821, when the separation from the mother-country became inevitable, the coinage sunk to \$3,007,650 (£1,613,512). In a few years afterwards, extraordinary efforts began to be made by British capitalists to restore the mines, and during the speculative excitement of 1825, many joint-stock companies were formed for this purpose. These associations began with spirit, and their shares speedily stained extravagant premiums; but it was soon found that almost every thing had to be reconstructed. The expenses attending the preliminary operations absorbed nearly the whole subscribed capital; while, owing to the defective mode of extractions absorbed nearly the whole subscribed capital; while, owing to the defective mode of extracting the ore, and the mismanagement of many of the companies agents, the produce was much less than was expected; and, in consequence, many of the undertakings were abandoned. Within a few years, no less than £3,000,000 of British capital were expended in enterprises connected with these mines; besides considerable investments by American and German companies. Notwithese mines; besides considerable investments by American and German companies. Notwithese mines; besides considerable investments by American and German companies. Notwithese and of the amount produced before the revolution. [Bullion.] The English companies at present in operation are six in number, and the funds invested by each are

Upper California), tobacco, jaiap, arraparius, vanues, vanues, vanues, devewoods.

The principal import is quickaliver, of which about 6,000,000 lbs. are annually consumed in the mines; it is mostly brought from England, into which it is carried from Spain; cottons, woollens, and linens, are brought from Entain, also iron, hardware, arms, and eartherware; glass-ware and linen from Germany; paper from Italy and France; wine and brandy from Spain and France; olive-oil from Spain; hats from France; spices from England, East Indies, and China; silks from China, Britain, and France; cocca from Venesuela and Ecuador. The declared value of British produce and manufactures sent annually to Mexica fluctuates generally between £400,000 and £700,000. An extensive trade is carried on with the United States, where most of the Mexican products find a ready market, and are paid for in the manufactures of those states or of Europe.

where most of the Mexican products find a ready market, and are paid for in the manufactures of those states or of Europe.

The Cate! Ports for foreign trade are—in the Gulf of Mexico, Vera Crus, Tampico, Campeachy, Matamoras, Sisal, and Tabasco; on the Pacific, San Blas, Masstian, and Acapulco; in the Gulf of California, Guaymas; and on the Sea of Upper California, Monterey, Of these, Vera Crus, on the east coast, in lat. 19° 15' N. long. 96° 30' W., distant 90 leagues from Mexico, and formerly the sole port for European commerce, is still that to which the greatest amount of imports are brought; it has yet also the principal export-trade in all commodities except the precious metals, which are mostly sent from Tampico, the port nearest to the richest mining districts. Vera Crus is defended by the celebrated castle of San Juan de Ullos; it is very unheality; and its harhour is merely a bad anchorage, open to the north winds, which blow with dreadful impetuosity from October till April. Indeed, scarcely any of the ports on the east side are good,—an accumulation of sand being constantly driven into them by the trade-winds. The shipping frequenting the Mexican ports is of inconsiderable amount, owing to the staples of its trade being mostly articles containing great value in small bulk.

MEASURES, MONLY, FIRANCES, &c.

The Measures and Weights are in general those of Spain; but the British yard and French aune are also used in the sale of European piece-

of Brain; but the British yard and French aums are also used in the sale of European piece-goods.

Money.—The principal money of account in Mexico, and throughout Spanish America, is the plastre or dollar(\$), which is divided into 8 reals, or 100 cents. The real is also divided into 16 quartos or 34 maravedis; into 2 medics, 4 quartillos, or 8 ochavos; and, as in paying duties, into 12 granos.

The coins are,—In gold, doubloons or ounces (nominally of 16 dollars), also \$, \$, and \$\frac{1}{2}}\$ doubloons: In diver, dollars, \$\frac{1}{2}}\$ dollars, \$\frac{1}{2}}\$ doubloons or pesctas, and reals of Mexican plate: In copper, quartillos, and clacos or ochavos. The gold coins throughout Spanish America are generally minted, as in Spain, at the rate of \$\frac{3}{2}}\$ doubloons to the Castile mark, 21 cerats fine; making the doubloon, when of full weight, worth \$\frac{1}{2}\$, 4s. \$\frac{3}{2}\$, 4s. \$\frac{3}{2}\$ dollars, 17 half-dollars, 34 pesctas, or 68 dollars, 17 half-dollars, 34 pesctas, or 68 dollars, 17 half-dollars, 34 pesctas, or 68 dollars, 17 half-dollars, and sometimes the Spanish dollar, is 10\frac{1}{2}\$ dineros fine in 12, and its value, when of full weight, is 4s. \$\frac{3}{2}\$, d. The half-dollar is of proportional value. The psectas and reals, however, are always inferior. The Spanish standard for these smaller coins is 9\frac{1}{2}\$ dineros fine; but in several of the new republics this standard has been reduced: in Bottvia it is now only 8 dineros, or \frac{2}{2}\$ ds pure silver to \frac{1}{2}\$ d of alloy. now only 8 dineros, or ids pure silver to id of

alloy.

The dollar of account is reckoned both in the small base coins (which form the ordinary currency of the Spanish-American states) and in hard dollars; the latter occur chiefly in foreign trade. The usual exchange of the hard dollar is about 49d.; or, what is the same, \$6 per £1,

EX, FIRANCES, &c.

or \$500 per £100. Remittances to Europe, however, are commonly made in specie.

Duties on imports are regulated by a tariff, non-enumerated articles in which pay 40 per cont.; quicksilver, tools, and seeds are free. Articles, the produce of Mexico, may be exported duty free, except the precious metals, which, in the shape of ore, ingots, or dust, are prohibited; gold, wrought or coined, pays 2 per cent. and silver 32 per cent. The import duties, being generally high, they are evaded by many devices, which are connived at by the customhouse officers, who are notoriously corrupt.

generally high, they are evaded by many devices, which are connived at by the custombous officers, who are notoriously corrupt.

Finances.—The public revenue was lately stated to average about \$12,500,000 (£2,500,000), mostly derived from customs; but this is exceeded by the charges upon it, and the finances have been long in a disordered state. The domestic debt is considerable; and there is a forging debt, originally composed of two English loans; one in 1824 of £3,300,000, 5 per cents, negotiated at 59 per cent.; the other, in 1923, of the same amount, of 6 per cents, raised at 592. By a subsequent arrangement, the unredeemed portion of these loans, with the arrears of interest due on them, were consolidated; the 5 per cents being taken at par, and the 6 per cents at 112; per cent.; and the whole created into a 5 per cent. at the content of the content of the content of the content of the content of the dividends.

"Deferred Bonds," to bear interest from lat October 1837; the other half, called "Deferred Bonds," to bear interest from lat October 1847. Little has since been done towards payment of the dividends.

**Treatly between Markon and Great British payment of the dividends.

A Treaty between Mexico and Great Britain was executed on 96th December 1826, providing for the protection and security of their commerce, and placing the two states respectively towards each other on the footing of the most favoured nations.

MICA, a finely foliated mineral substance, sometimes used as a substitute for glass, particularly in certain kinds of stoves, to enclose the fire without concealing the flame. The large sheets of mica met with in this country are mostly imported

from Siberia.

MILE, an itinerary measure, varying in different countries. [Measure.]
MILK (Fr. Lait. Ger. Milch), a secreted liquid intended for the nourishment
of the young of mammiferous animals. The milk of the cow is that chiefly used by
mankind. Butter is obtained from this fluid by agitation, and cheese by coagulation. mankind. Butter is obtained from this fluid by agitation, and cheese by coagulation. The cow yields her milk most plentifully for some time after calving; then gradually yields less and less; and for six weeks or more previous to bringing forth her young, she usually becomes dry. The quantity varies greatly with the health, constitution, and treatment of the animals; but on a well-managed dairy-farm, where a proper breed of cows exists, the average yearly produce may be reckoned at from 700 to 800 gallons for each. Two gallons of milk or a little more will yield about 1 lb. of butter; and from 7 to 8 pints will yield 1 lb. of cheese (Low's Agriculture). Milk is only raised for direct sale in the neighbourhood of towns: in London and its environs, Mr Youatt estimates that 12,000 cows are kept at present for that purpose alone. At greater distances from towns, milk is generally converted into butter; and in still more remote places into cheese, or into butter which is salted. Mr M'Queen values the annual produce of the dairy in the U. K. as follows:—Milk, £12,000,000; butter, £13,500,000; cheese, £7,000,000; total, £32,500,000.—(Statistics, p. 48.) S

MILLET, a kind of grain (Holcus) imported into this country from Germany and the south of Europe, chiefly for feeding small birds. There are a variety of different species. In most countries lying under the warmer latitudes of the temperate zone, the millets form a very essential article of domestic economy, being

perate zone, the millets form a very essential article of domestic economy, being deprived of the husk and used whole as rice, or ground into meal and flour, and

made into bread.

MILREA, the integer of account in Brazil and Portugal.
MINIUM, or RED LEAD, is massicot finely ground and calcined. It is a

red powder, but with a liability to turn black. It is used in painting, in the manu-

red powder, but with a hability to turn oneca. It is used in painting, in an arrival facture of glass, and in surgery.

MINOT, an old French measure, equal 1073 Imp. bushel.

MISCAL, an Oriental weight, equal 74 troy grains nearly.

MOCHA STONE, is a semi-transparent calcedony, including various ramified forms produced by iron, or other mineral substances, but sometimes also by the presence of vegetable bodies, such as mosses. The finest are found in Gujerat, but received their name from having been brought from Mocha. An inferior sort is also found in Garmany.

also found in Germany.

MODENA, a ducal state in N. Italy, between the Papal States and Parma.

Area, 2080 sq. miles. Population in 1833, 403,500. The government is the most absolute in Italy.

absolute in Italy.

About one-half of the territory is covered by the chain of the Apennines and its offices; one-third more forms part of the plain of Lombardy; and a small but rich strip extends along the abores of the Mediterranean. Principal towns, Modena and Reggio. Exports, horned cattle, swine, fruit, silk, corn, brandy, wine, vinegar, and the marble of Carrara, both wrought and unwrought, which employs 1200 workmen, and yields annually about £30,000. A great fair takes place at Reggio, in March.

The bracel of Modena = 24-31 Imp. inches; the bracels of Reggio = 20-85 Imp. inches. The bioles, land measure, of 72 tavole = 0-7009 Imp. acre. The stajo of corn = 1-94 Imp. bushel. The quintal of 100 Modena lbs. = 70-45 lbs. avoird.; and 100 Reggio lbs. = 72-74 lbs. avoird. The general money of account is the lira Italiana, divided into 100 centimes, and equal in value to the French franc, or 9\(\frac{1}{2}\)d. The old Modena lira of 90 soldi or 940 denari = 3\(\frac{3}{2}\)d.; and the lira of Reggio = \(\frac{3}{2}\)d.

of Reggio = 21d.

MOGIO, an Italian measure of capacity, varying in different places.

MOHAIR, the hair of the Angora goat; it is made into camlets, &c.
MOHAIR, the principal gold coin of INDIA.

MOIDORE, or LISBONNINE, an old Portuguese gold coin, value 26s. 114d.

MOLASSES. [Sugar.]

MOLASSES. [Sugar.]

MONEY, any commodity employed as a standard by which to measure the value of others, as the equivalent given for them, and as a medium of exchange. Various articles have, in different states of civilisation, been used to perform the functions of money,—as cattle, sait, furs, tobacco, silk, cowry shells, and some others; but in almost all parts of the globe these are now superseded by silver and gold, owing to their greater portability, divisibility, and indestructibility, and to their being less liable than almost any other commodities to fluctuations of value. In early ages, the denominations of money were identical with those of weight, and the metals were circulated in ingots or small measure. But as civilization advanced the metals were circulated in ingots or small masses. But as civilisation advanced, and transactions increased, the constant trouble of weighing them, and, in most instances, of also assaying them, produced a degree of inconvenience, that led to the introduction of small pieces, impressed with a national stamp, which rendered both operations unnecessary. These, under the name of Cours, became thus in general use in transactions between individuals belonging to the same political community; though silver and gold, in their former state of ingots or bars, have continued to be employed, in a greater or leaser degree in international archanges.

general use in transactions between individuals belonging to the same political community; though silver and gold, in their former state of ingots or bars, have continued to be employed, in a greater or lesser degree, in international exchanges. Some states, in their coinage, have made use of one metal only as standard money, or legal tender to any amount; others, of both gold and silver, at a certain fixed relative value. In the United Kingdom the standard is gold, which is coined at the rate of 1869 sovereigns from 40 troy pounds of standard metal, or, what is the same, at £3, 17s. 10 d. per ounce. In France, Austria, Russia, and most other continental states, there are two standards; but owing to the relative value of gold to silver being fixed by their mint regulations at a rate higher than their relative value in the market, the latter metal alone is practically in use as legal tender, and an agio on the mint rate has to be paid in order to procure gold. In the United States, where there are also two standards, this rule was reversed in 1834, when, owing to a reduction in the weight of their gold coin [Eagle], that metal became the general medium for large payments instead of silver.

Of the precious metals, gold, from its superior portability, has been always preferred for large payments and foreign remittances. But, in the progress of society, it became gradually apparent that the advantages of metallic money were chiefly confined to its functions as a standard and equivalent of value; as a medium of exchange, its weight, the trouble of counting large sums, and the risk of losing while removing what has obtained value; as a medium of exchange, its weight, the trouble of counting large sums, and the risk of losing while removing what has ogreat an intrinsic value, rendered it unfit for the extended operations of modern commerce. These inconveniences led, in the four-teenth century, to the introduction of bills of exchange; and, at a later period, to that modification of these instruments which has obtaine

this "coining of credit," is often pointed out as the chief advantage of papermoney; but this is a narrow view of its conveniences. Metallic money would not, even supposing its quantity unlimited, suffice for carrying on so much perhaps as a hundredth part of the transactions that take place in Britain alone; while, in the greater part of those between distant places, the inconvenience and cost of transporting it from place to place would be so great, that direct exchange or barter would be found the preferable mode of proceeding.

In the continents states, naner-money is generally supplied by their respective

In the continental states, paper-money is generally supplied by their respective governments, either directly, in the shape of treasury notes, or indirectly, through the medium of banks under their control. In the United Kingdom, it is issued, partly by chartered banks, invested with peculiar privileges, and partly by joint-stock and private banks, the amount of the whole being commonly about £38,000,000; which, with £25,000,000, the estimated amount in coin, makes the circulation in all £63,000,000. But, in viewing this as the amount of our circulation, regard which, with £25,000,000, the estimated amount in coin, makes the circulation in all £63,000,000. But, in viewing this as the amount of our circulation, regard must be had to the extent to which the use of money is economised, by the employment of bank-cheques and letters of credit, by the speedy, in many cases the immediate return of notes, produced by the system of allowing interest on bank-deposits, and by many other operations, not forgetting that of the Clearing-house, where payments ranging from £1,500,000 to £6,250,000, are effected daily by the private bankers of London with only about £200,000 of bank-notes. In other countries, the sixulation is from the absence of such facilities comparatively was because. eirculation is, from the absence of such facilities, comparatively much greater. In France alone, the amount of coin in use is not under £100,000,000; that of banknotes, however, being only £12,000,000.—(Report on Banks of Issue, 1840, Q. 7570.)

The rate at which money exchanges for other articles is determined by its quantity. "If," says Mr Mill, "we suppose that all the goods of the country are on one side, all the money on the other, and that they are exchanged at once against one another, it is obvious that one-tenth or one-hundredth, or any other part of the goods, will exchange against one-tenth, or any part of the whole of the money; and that this tenth will be a great quantity or small exactly in proportion as the whole quantity of the money in the country is great or small" (Polit. Econ. c. 3, § 7). The quantity of money, however, is to be estimated, not merely by its proportion to the amount of trade or of payments, but also by the relative rapidity of its circulation, and after allowing for the extent to which its use is economised. Supposing the amount of trade and mode of circulation to remain stationary, if the quantity of money be increased, its value will fall, and the price of other commodities will proportionally rise, as the latter will then exchange against a greater amount of money: if, on the other hand, the quantity of money be reduced, its value will then have to be exchanged for a less amount of money. The converse of these changes will take place if the variations occur in circulation is, from the absence of such facilities, comparatively much greater. diminished, as commodities will then have to be exchanged for a less amount of money. The converse of these changes will take place if the variations occur in the amount of trade and mode of circulation, and the quantity of money remain stationary. "In whatever degree, therefore, the quantity of money is increased or diminished, other things remaining the same, in that same proportion the value of the whole and of every part is reciprocally diminished or increased" (Ibid). Gold and silver, however, as products of industry, possess an intrinsic value, like all other commodities, equivalent to the cost of producing them; and hence, in the case of metallic money, if its value in any country be reduced below the level of other countries, it will be used or exported as bullion; while, on the other hand, if its value be increased above that level, it will become an object to import bullion to convert it into coin. The value of metallic money in any country can thus be for only a short time above or below its level in other countries, or its cost of production. A mixed currency, composed of coin, and paper convertible into coin, is duction. A mixed currency, composed of coin, and paper convertible into coin, is obviously regulated by the same laws. But such is not the case with an inconvertible paper-money; for, though under equal limitations as to quantity, it may, when constituted legal tender, be preserved of the same exchangeable value as metallic money; yet, wanting intrinsic value, it will not circulate in foreign coun-

^{*} In the year 1839, the amount of payments made through the Clearing-house was £944,401,600, which were effected with only £65,275,600 of bank-notes: thus giving £3,068,815 as the average of the daily payments for the 311 business days; £213,105 as the average amount of bank-notes daily used; and leaving £2,855,710 for the daily cancelments of the clearing transfers. These sums, enormous though they be, are considered to fall far short of what they were formerly, when the Bank of England less interfered with private business, when London joint-notech banks (which are not admitted to the clearing-house) were not in existence, and when war-expenditure and funding operations gave constant activity and extent to the money business. Several days clearances then ranged from £12,000,000 to £15,000,000.—(Tate's System of the London Bankers' Clearances, p. 37.)

tries; and hence, when issued in excess, it will become proportionally depreciated; and this depreciation (which will be measured by the rate at which the paper exchanges against bullion) may, by continued additions, go on increasing, until its value as a medium of exchange is entirely dissipated. [Assignars. Bank.]

Bark.]
But although fluctuations in the value of a metallic or mixed currency, owing to variations in quantity, are subject to correction from the influence of the currencies of other countries, the case is different when any diminution is made on the weight of the coin. In this case, though preserving the same name, it will become permanently degraded; and if reduced one-half, will as certainly be lowered in real value to the same extent, as a quarter of wheat would be by being reduced to four bushels. In ancient times, owing partly to erroneous conceptions of the nature of money, but chiefly to the injustice of sovereigns, who were thereby enabled to fulfil, in appearance, their engagements with a smaller quantity of gold and silver than would otherwise have been requisite, the degradation of the coin was a common act of public policy; and the English pound was, in this way, reduced to 1-3d, the Scottish to 1-36th, and the French livre to 1-66th of their original values. Such an expedient is now almost unknown in civilized communities; but a similar effect may be produced by fraudulent paring or by abrasion. When a seignorage is exacted higher than the expense of coinage, the coins can be used only, like British silver or copper, as a subordinate species of

intrinsic value of the coin will of course be less than its nominal value, but such coins can be used only, like British silver or copper, as a subordinate species of money for small payments, and under certain limitations as to quantity.

A currency may be accounted in its most perfect state when it consists of paper of a value precisely equal with the gold or silver which it professes to represent; as no other instrument can fulfil in a higher degree the great requisites of a circulating medium,—convenience, cheapness, security, and steadiness of value. But considerable difference of opiniou prevails in reference to the method best adapted for the practical attainment of these objects. Of late there has arisen a party, who, on the allegation that undue expansions and contractions of the currency have been the secret spring of all those alternations of commercial excitement and depression which have taken place in modern times.—advocate the senaration of the functions which have taken place in modern times,—advocate the separation of the functions of issue from those of banking, and the confining of the former to one state establishment, which should circulate a fixed amount of government paper-money (below the point to which a purely metallic currency would ever be reduced), and leave all fluctuations to take place in the precious metals alone, or in the notes of a bullion deposit bank; or which should in some other way regulate the amount of the circulating medium, as that there should be no greater fluctuation than if it wholly lion deposit bank; or which should in some other way regulate the amount of the circulating medium, so that there should be no greater fluctuation than if it wholly consisted of the precious metals. Such plans, however, are opposed both by those who uphold the present system, and by those who, advocating the further extension of joint-stock banking, contend that the issues of paper are best regulated by free competition. By the latter it is urged that experience has shown that no single body can be safely intrusted with the privilege of issuing paper: That if there was but one such body, there would be sometimes too much money and sometimes too little for the wants of trade in different places: And that, after declaring a certain coin to be the sole standard of value and lead tender, and declaring a certain coin to be the sole standard of value and legal tender, and providing for the public registration of all the partners of a bank, and their unlimited responsibility for all its obligations, the lengthened experience of Sootland has shown that were government to confine its further interference to enforcing the fulfilment of contracts, it might safely be left to the parties themselves to judge

the fulfilment of contracts, it might sately be left to the parties themselves to judge of the degree of credit they should give to each other's engagements, and to adopt that mode of circulating such engagements which might appear to them to combine the greatest security with the greatest cheapness and convenience.

Upon these and the other plans advocated by writers on the currency, however, it is unnecessary to enlarge in this place. They form, as is well known, the subject of two reports in 1840 and 1841 by Committees of the House of Commons; and such persons as feel an interest in the question will not satisfy themselves with any second-hand arguments, but will of course refer to those reports, or to works where

the subject is treated in a manner suited to its importance

In the preceding observations we have assumed gold and silver to be invariable as standards; but in the article Bullion we have explained that in the course of ages these metals have themselves undergone great changes. In fact, no commodity can be depended on as a permanent measure of value. The facilities of its production will not always preserve the exact level of the average of other commodities, and move on in complete uniformity with the general progress of improvement in the industrial arts. No kind of money at present in use, therefore, can be free from the great variations of value to which the precious metals themselves are liable. Such a currency, however, has been imagined. "It has been proposed," says Mr Poulett Scrope, in his ingenious Treatise on Political Economy, "to correct the legal standard of value (or at least to afford to individuals the means of ascertaining its errors) by the periodical publication of an authentic price-current, con-taining a list of a large number of articles in general use, arranged in quantities corresponding to their relative consumption, so as to give the rise or fall, from time corresponding to their relative consumption, so as to give the set rail, row time to time, of the mean of prices; which will indicate, with all the exactness desirable for commercial purposes, the variations in the value of money, and enable individuals, if they shall think fit, to regulate their pecuniary engagements by reference to this Tabular Standard " (p. 407). This proposition, however, is of too speculative a mature for consideration in the present work.

MONIES OF ACCOUNT are those denominations and divisions of money in which ac-Moniss of Account are those denominations and divisions of money in which accounts are kept: in some countries these are not coins, but merely fixed proportions to coins, as was the case with the British pound sterling before the coining of the sovereign. In the Report by the Commissioners on the Standards of Weight and Measure, of 21st December 1841, the attention of the government is invited to the advantage and facility of establishing a decimal system of monies instead of that presently in use in this country. The facility consists in the case of interposing between the sovereign (or pound) and the shilling, a new coin equivalent to two shillings (to be called by a distinctive name); of considering the farthing (which now passes as the 1-960th part of the pound) as the 1-1000th part of that unit; of establishing a coin of value equal to 1-100th part of the pound; and of circulating, besides these decimal coins, others bearing a simple relation to them, including the present shilling and sixpence. the present shilling and sixpence.

MONOPOLY, a privilege granted by license, conferring on an individual or company the sole right of purchasing and disposing of, making or using, a certain specified article; the term is likewise sometimes used to denote the engrossing of commodities with the view of selling them at a high price. Monopolies were formerly granted by the sovereign, and they prevailed to a great extent in England in

merly granted by the sovereign, and they prevailed to a great extent in England in Queen Elizabeth's time; but, having become an intolerable grievance, they were abolished in the succeeding reign (21 Jac. I. o. 3), with the exception of patents for inventions or improvements for a limited number of years; and a charter of monopoly cannot now be granted without an act of parliament. The same law has been held to apply to Scotland.—(Bell'R Com. vol. I. p. 108.)

MONSOONS, important modifications of the trade-winds which occur in the Indian Ocean, the nature of which is not yet fully understood.

In the Arabian and Indian Seas, on the north side of the equator, the monsoon blows northeast from November to March, and south-west from April to October; the former producing in India dry and agreeable weather, the latter rain and tempest. The change takes place gradually. In the Chinese and Scoloo Seas, however, the wind is generally N.N.W. from November to March, and S.S.E. from April to October. [India. Trads-Wind.]

MONT DE PIÈTE, a benevolent association for lending money on pledges at a moderate interest; and differing from ordinary pawnbroking establishments in being founded rather for the benefit of the borrower than that of the lender. Such institutions are said to have existed in Rome in the reigns of Augustus and Tibe-

being founded rather for the benefit of the borrower than that of the lender. Such institutions are said to have existed in Rome in the reigns of Augustus and Tiberius. They were revived in modern Italy in the 15th century, where they received every encouragement from the popes; and they exist at present in all the large towns in that country, the principal being the "Sagro Monte de Pieta di Roma," founded in 1539, and which in 1839 advanced no less than £211,554 on 306,161 pawns, the average amount of each being 14s. 2½d. The establishment likewise acts as a petty bank in receiving deposits. Monts de Piété are also instituted in many other parts of the Continent, particularly France. The "Mont de Piété de Paris" charges interest at 9 per cent., and one-half per cent. to the valuators at the time of releasing: the amount advanced by it in 1840 was £743,040 on 1,220,692 pawns, besides £230,553 on renewed articles. The loan is made for a fixed term, at the expiration of which, if the principal and interest are not repaid, the pledges are sold, and the surplus, after paying the debt, is restored to the owner: in most instances, however, the term may be renewed on payment of the interest. The profits are in some cases added to the capital, in others appropriated to charitable purposes. Such institutions are common in several parts of Ireland, but they are almost unknown in Britain, where their place is supplied by pawnbrokers. [Banks PON Savings. Loan Societies. Pawnerour.] FOR SAYINGS. LOAN SOCIETIES. PAWNBEORER.]
MONTEVIDEO. [URUGUAY, REPUBLIC OP.]
MORGEN, a German land measure varying in different places.

MOROCCO, the most important of the Barbary States, is bounded W. by the Atlantic; N. by the Mediterranean; E. by Algiers; and S. by the Sahara or Great Desert. Area, 274,000 sq. miles. Population, 8,500,000, mostly Arab Moors and Berbers. The chief cities are, Morocco the capital, Fez, and Mequinez, all inland. The government is a barbarous despotism.

Berbers. The chief cities are, Morocoo the capital, Fez, and Mequinez, all inland. The government is a barbarous despotism. S

The loftiest part of the chain of the Atlas runs parallel to the coasts, changing its direction with them from the Atlantic to the Mediterranean, and leaving an intermediate plain, the greater part of which is finely watered, and unsurpassed in natural fertility. But though the inhabitants have advanced greatly beyond the rude and roaming habits for which they were anciently distinguished, they pay little attention to the improvement of the land, which indeed might be made one vast corn-field. Beyond the Atlas, however, there is a more arid region, named Tafilet, unfit for grain, but yielding fine dates, and rearing a breed of goats, whose skins afford the fine morocco leather. The climate is not so hot as might be expected from the latitude, and wheat and barley are extensively raised; sheep are numerous, and produce fine wood, which is manufactured into a coarse fabric, forming the chief dress of the inhabitants. An active inland trade is carried on with Soudan, Reypt, and Arabia by caravans, and with other countries by sea.

The maritime commerce has increased considerably of late years. The imports consist chiefly of cotton, woollen, and silk manufactures and yarn, with raw silk, sugar, spices, dye-stuffs, metals, cutlery, tea, and carthenware; the exports of fruit, wood, olive-oil, wax, hides, corn, live-stock, gum, bark, and leeches. In 1839, the regular importations by sea amounted to £560,580, including £135,400 in specie; and the exportations to £480,360, including £94,400 in specie. But there is besides an extensive contraband trade, which it is estimated will swell these values one fourth. Upwards of three-fourths of the trade is with the British: in 1839, the imports from England amounted to £460,360, and the exports to £366,660. A considerable part of our commerce is carried on through Gibraltar and Malta. Almost the only other states which participate in the maritime inter

MORPHIA, a vegetable alkaloid, procured by a chemical process from opium, and is the narcotic principle of that substance. When obtained from its alcoholic solution it is in small, brilliant, and colourless crystals, of a very bitter taste. The quantity obtained averages about 1 oz. from the lb. of opium; but it is very variable; the Turkey opium produces the most, and the East Indian and Egyptian the least Indian and Egyptian the

able; the Turkey opium produces the most, and the East Indian and Egyptian the least. [OPIUM.]

MOSAIC GOLD, a bisulphuret of tin, formed by heating the peroxide with its weight in sulphur. It is produced in small, soft, shining flakes, of a golden yellow colour. It is chiefly imported from Germany, and under the name of bronse powder is much used for ornamental work, particularly paper-hangings.

MOTHER-OF-PEARL, the shell of the pearl-oyster. It is composed of alternate layers of coagulated albumen and carbonate of lime. On the inside it is exquisitely pelished, and of the whiteness of the pearl; and on the outside the lustre is the same after the external lamines have been taken off. It is imported into Europe from India and China, and is extensively used for inlaid works, toys. into Europe from India and China, and is extensively used for inlaid works, toys, and snuff-boxes.

MOUSSELINE DE LA LAINE (in Fr. muslin of wool), a fine, thin, woollen fabric, manufactured in France, and much used for the dress of ladies. An inferior fabric, bearing the same name, and of similar appearance, though composed of wool mixed with cotton, is now also extensively made in Britain.

mixed with cotton, is now also extensively made in Britain.

MOZAMBIQUE, a territory claimed by the Portuguese, on the E. coast of Africa, extending nominally from the Bay of Delagoa to Cape Delgado, and divided into seven captaincies; but their real possessions in this country are now few and insecure, and confined chiefly to the town of Mozambique, and the settlements of Quillimane, Senna, Tette, and Manica, on the Zambezi river. Melinda, once a flourishing settlement on the adjoining coast of Zanguebar, is deserted.

Moscowbique, the capital, and commercial emporium of the Portuguese possessions on the Eccent of Africa, is situated on a small island closely adjoining the continent, in lat. 15° y S. long. 40° 43° E.; pop. nearly 10,000, of whom only a few hundreds are Europeans. It possesses a good readstead and commedious pier; but in other respects it is situated unfavourably, being about 300 miles distant from the mouth of the Zambezi, the channel of intercourse with the interior. It is also unhealthy. The chief articles to be obtained at these settlements are gold, ivory, ambegrie, Columbo root, tortoise-shell, and cowries. The export of slaves to Brazil was formerly considerable, and is believed to be still carried on to some extent. Provisions and refreshments are dear.

MUD 484

Of late much of the trade has been removed to Quillimane, at the mouth of the Zambezi, in lat. 17° 56' S., long. 36' 55' R.; pop. 3000. Weights.—The bahar weight is 20 frasils = 240 list avoird. The currency is chiefly Spanish dollars and Portuguese coins.

MUDDE, a Dutch and Belgian measure = 23 Imp. bushels, or 1 hectolitre. MULE, a quadruped springing from the union of the male ass with the mare, or of the horse with the female ass,—the former being the best. The mule is commonly found to be vicious, stubborn, and obstinate, to a proverb; but it is hardy, and valuable for its sureness of foot. It is also useful on account of the great load which it can carry. Hence its common use in some parts of Spain, in Mexico, South America, and in other mountainous countries without good roads. The South America, and in other mountainous countries without good roads. The Persian mules, according to Mr Fraser, are of prodigious strength, usually carrying loads of about 3 cwt., with which they travel day after day along the executable paths and over the rough cothule of the country (still preserving their condition), at the rate of from 25 to 50 miles a-day, according to the distance of the resting-places. The mule is longer-lived than either the horse or the ass; but it is seldom used in this country.

MILLET a flat (Mucil) greatly prized by the colourer of patient Ports and

MULLET, a fish (Mugil), greatly prized by the epicures of ancient Rome, and the roe of which is at present largely made into Botarga, on the shores of the Mediterranean. The mullet is gregarious in its habits, about 12 or 14 inches in length, and of a peculiar form and brilliant appearance. One species, the red mullet, is taken on the S. coast of England, particularly in May and June. It is caught by the mackerel-nets, and in larger quantities by the trawl-net.

MUM, a fermented liquor, brewed principally from the malt of wheat.

MUNJEET, an inferior kind of madder-root imported from Calcutta. The roots

are long and slender, with a smell somewhat resembling liquorice-root; when broken they appear of a fine red colour, having a yellowish pith inside. Nearly 30,000 bales are on the average imported annually, each weighing 20 lbs.

MURIATIC ACID, or SPIRIT OF SALT, an aqueous solution of muriatic states.

acid gas, now called hydrochloric acid gas. It is commonly procured by distilling a mixture of diluted sulphuric acid and common salt, equal weights being taken of salt, acid, and water. This acid is generally of a yellow hue, a very pungent smell, intensely sour taste, and emits fumes when exposed to air. Sp. gr. 1170. The yellow hue is produced, according to Dr Thomson, from a trace of bromine; besides which, the acid of commerce is almost always contaminated with iron and sulphurie acid, and sometimes nitric acid. When pure it is colourless. Muriatic acid is

acid, and sometimes nitric acid. When pure it is colourless. Muriatic acid is used in medicine, and in some of the arts as a solvent of metals.

MUSCAT, a fortified seaport town on the E. coast of Arabia, and chief commercial emporium of the Persian Gulf, lies in lat. 23° 38' N., long. 58° 41' E. Population, including Muttrah, 60,000, composed of Arabs, Banyans, and a few Persian merchants. It is the capital of a sultan, whose patrimonial dominion is the surrounding territory of Oman, but who claims the whole coast from Cape Aden to Cape Ras al Had, thence northwards as far as Bussorah, including the islands of Bahrein, with all the African shore and adjacent islands from Cape Delgado to Cape Grandafu. He reputs besides sulphus mines and several extent in Parsia. Cape Guardafui. He rents, besides, sulphur mines and several estates in Persia.

Cape Guardatui. He rents, besides, sulphur mines and several estates in Persia. The harbour of Museat is formed by a small island, consisting of a huge mass of granite, 200 feet high, situate so near the mainland as only to allow the free passage of small vessels. The town is one of the hottest places in the world, Fahrenheit, though about 50° in January and February, ranging between 90° and 115° in July and August. The trade is considerable. Besides an extensive intercourse with the interior by means of caravans, Muscat is frequented by seesls from the shores of the Persian Guif, the Red Sea, and from the east coast of Africa; and the produce of all the countries adjoining these places is generally found in the market. Trade is also carried on with Mauritius, India, China, and the Eastern Islands. The chief exports are dates, horses, raisins, wheat, salted and dried fish, sharks fins, pearls, and drugs. The imports are rice, cotton, and woollen goods, iron, lead, sugar, and some spices; and the value annually imported is estimated as £300,000.

mated at £900,000.

The maund of 24 cuchas = 8 lbs. 12 oz. avoird. The integer of account is the mahomodee of 30 gasees. The mahomodee is a silver coin, of which il are reckoned equal to a Spanish dollar. The gasee is of copper; as is also the shake, valued at from 72 to 80 per dollar. Foreign coins circulate, but are generally transferred by weight.

A convention with Britain, dated May 31, 1839, and ratified July 22, 1840, contains, among other provisions, a stipulation that no duty exceeding 5 per cent shall be levied at the place of entry in the sultan's dominions on British merchandise imported in British vessels, which shall be in full of all import, export, tomage, and license duties, and of any other government import upon the vessel, or upon the goods; nor shall any charge be made on account of goods remaining on board unsold, nor on vessels entering to refit or for refreshments. A similar treaty was effected by the Americans on September 21, 1833.

The present suitan is distinguished for energy and intelligence; and the protection he affords to property is so efficient that the Banyans have formed a marine insurance society, of which the Arab traders generally avail themselves. He possesses a considerable navy, and his subjects are excellent seamen.

MUSCLE, a shell-fish (Mytitus edulis), abundant on our seashores, and largely used as food, though opinions differ as to its wholesomeness. The finest are the "Hambleton Hookers" of Lancashire; they are taken out of the sea, and fattened in the river Wyre, within reach of the tide.

MUSHROOM, a tribe of fungus plants (Agaricus), some species of which are used for pickling, catsup, powder, and for dressing fresh. Their season in England is September; and the most delicate are those found on old close-cropt pastures, or onen downs by the seashore. Many kinds are poisonous, and it is only by

or open downs by the seashore. Many kinds are poisonous, and it is only by experience that the catable varieties can be distinguished. That usually cultivated is the A. compestric. The properties of mushrooms are better understood on the Continent than in England; more particularly in Russia, where they constitute an

important article of food.

MUSICAL INSTRUMENTS may be arranged into three classes, namely, wind MUSICAL INSTRUMENTS may be arranged into three classes, namely, wind instruments, stringed instruments, and those in which the sound is produced by concussion. Their manufacture and sale affords employment to a considerable number of persons in this country, more especially in London, and, though to a smaller extent, in Edinburgh and Dublin. But the peculiar nature of the trade places it in a great degree beyond the scope of the present work; some particulars, however, deserving of notice, were furnished to the parliamentary committee on import duties. It appears that British pianos excel all others; and that though in Germany, in consequence of more diffused musical habits, they are currently made for £10 or £12, our manufacturers do not dread the abolition of tariff protection, owing to the superior tone and durability of their instruments; the best harps and flutes are also made in England; but the finest brass wind-instruments are imported. The timber employed for the sound boards of good stringed instruments is said to be

also made in England; but the finest brass wind-instruments are imported. The timber employed for the sound boards of good stringed instruments is said to be "Swiss deal;" for those of an inferior kind, American pine is used.

With respect to the violin, the "sovereign of the orchestra," it has been remarked, that "the best can now be said to be made nowhere." This instrument, however, improves by age, and many of the old ones are of great value. The finest in the world are those of the Amati family of Cremona, who flourished in the 16th century. The chief other makers are Stradivarius, the elder and the volumer and Guarnerius also of Cremona, in the 17th century and Strainer and Strainers. younger, and Guarnerius, also of Cremons, in the 17th century; and Stainer, a native of the Tyrol. A good-toned violin cannot be bought in England or France for less than £50, and many have been sold for £250. An instrument made by

Stradivarius can always be sold for £100.

Stradivarius can always be sold for £100.

Musical instruments, mostly pianos, are exported in considerable quantities, principally to the colonies, India, and S. America. The importations, embracing a variety of instruments, amount annually to about £12,000. S

MUSK (Fr. Muso. Ger. Bisam. It. Muschio. Rus. Kabarga), a fragrant substance scereted in a glandular pouch under the belly of the male of the musk-deer (Moschus Moschiferus), which inhabits the elevated regions of Asia. Musk in its recent state has the consistence of an electuary of a reddish-brown colour; but by keeping it becomes dry and crumbly. The best comes from China in small round bags, covered with brownish hairs, and containing at the most 1½ drachm, large-grained, and of a deep brown colour, and a strong ammoniacal smell. The Siberian or Russian musk is greatly inferior. It is small-grained, light brown, of a weaker and more fetid smell, with little ammoniacal odour; the bags longer and larger. Musk from its high price is often adulterated, more especially when purchased in grains, and not in the natural bags of the animal. It is an article of the materia medica, and is extensively used as a perfume. It should be preserved in materia medica, and not in the natural page of the animal. It is an article of the materia medica, and is extensively used as a perfume. It should be preserved in closely stopped glass bottles, in a place neither very dry nor too damp.

MUSQUASH, largely used as a "hatting-fur," is the skin of the musk-rat, a diminutive species of beaver. [Fur.]

MUSLIN, a fine thin cotton fabric, extensively manufactured in Glasgow and lanchester. It is used for handkerchiefs, ladies' caps, gowns, frills, and other Manchester. purposes; and there is a great variety of kinds and qualities,—as book-muslin a starched or dressed kind), cambric-muslin, jaconet, mull, and others. Dacca, in

Bengal, was formerly celebrated for its muslins, aconec, mun, and others. Dacca, in Bengal, was formerly celebrated for its muslins, some rare specimens of which have been poetically described as "webs of woven wind." [COTTON MANUFACTURE.] MUSTARD (Du. Mostert. Fr. Moutarde. Ger. Mustert), a plant (Sinapis) cultivated in Britain chiefly for its seeds. These when bruised form a bright yellow powder, of a pungent smell and acrid taste, called flour of mustard, which is used as a condiment, and for various purposes in medicine. There are two kinds, a black (S. nigra), and a white (S. Alba); the first was formerly preferred, being more pungent, and of a much finer quality; but as the flour made from it

retains a darkness of colour, from which that of the white variety is free, and as, besides, less labour is required in the manufacture of the latter, it is now more generally employed in Britain, either alone or in mixture with the other. The manufacture of mustard was first understood and practised in Durham, but it is now common in other parts of England.

MYROBALANS, a name given to several species of dried fruits of the plum kind, employed in dyeing and medicine by the natives of India. Five species are described by Mr Milburn in his Oriental Commerce. They are not used in this

described by Mr Mindurn in his Oriental Commerce. They are not used in this country. S

MYRRH (Arab. Murr. Fr. Myrrhe. It. & Sp. Mirra. Ger. Myrrhen), a gum resin, celebrated from the earliest ages for its aromatic and fragrant properties, is the product of a small tree (Balsamodendron myrrha) found in Nubia and Arabia Felix. Several kinds are distinguished. The best, myrrh in tears, is when good of a yellow or reddish-yellow colour, light, brittle, pellucid, and sometimes shining; fracture vitreous or conchoidal, of a bitter aromatic taste and peculiar smell. Sp. gr. 1'36. It is mostly imported from the Levant. The East Indian is in large one one pieces, generally covered with a brownish-white nowder. Myrrh mich. Sp. gr. 1 30. It is mostly imported from the Levant. The East Indian is in large opaque pieces, generally covered with a brownish-white powder. Myrrh in sorts is the name given to a variety of inferior and adulterated kinds. This gum-resin is at present used as a stimulating medicine, and as an ingredient in tooth-powders.

N.

NAILS (Fr. Clous. Ger. Nägel, Spiker. It. Chical. Por. Preges. Rus. Giucedi. Sp. Claves) are made in most towns of the United Kingdom, but chiefly at Dudley, Stourbridge, Walsall, and other places near Birmingham, where about 25,000 persons are employed in this manufacture. The best are made by the hand at the common forge, but vast numbers are now produced by machinery. In Birmingham, well-formed nails are cut out of sheet-iron with the greatest rapidity; neatly-shaped heads are given to them by powerful pressure; while in the process of annealing a tenacity is communicated to them which almost rivals the productions of the force.

of annealing a tenacity is communicated to them which almost rivals the productions of the forge. About 5500 tons are annually exported. NANKIN, a Chinese cotton cloth, which, in point of strength, durability, and essential cheapness, is unrivalled by any of the cotton fabrics of Europe. The best is the produce of Kiang-nan or Nan-kin; and an inferior description is manufactured in Quang-tung. It is either white, blue, or brownish-yellow; the last being the result of dye, and not the natural colour as vulgarly supposed. Nankin is now little used in England; but the consumption in warm countries is still considerable. The quantity got up at Canton for the foreign market is very variable. Under the British flag alone, in 1831, there were exported 925,200 pieces, valued at £107,323. In later years, the quantity has been much smaller; in 1834, it had fallen to 65,900 pieces. Imitation nankins are made in this country, but they are inferior to those of China.

they are inferior to those of China.

NAPHTHA, a peculiar liquid hydrocarbon or species of bitumen, which is both a natural and artificial product. Natural naphtha is found at Baku on the Caspian, natural and artificial product. Natural naphtha is found at Baku on the Caspian, at Hit on the Euphrates, and other places in Mesopotamia; in Italy, near Piacenza, and of an inferior quality near Modena; and a similar liquid is obtained by the distillation of petroleum and caoutchouc. Coal naphtha or coal cil, the kind chiefly used in this country, closely resembles the former, and is one of the results of the distillation of pit-coal in gas-works, from which it is usually obtained. Naphtha is of a yellowish-white colour, transparent, and fluid as water, inflammable, and very volatile. The purest Persian and Italian variety has a strong bituminous but not disagreeable odour; Sp. gr. 760. The coal naphtha has a penetrating and unpleasant odour; Sp. gr. 840. It dissolves the greater number of the essential oils, and the resins; and is extensively used for dissolving caoutchouc to render cloth waterproof, and for forming surgical instruments. It is also burnt instead of alcohol in lamps for heating small vessels. In Genoa naphtha is used in the street-lamps.

or accord in lamps for heating small vessels. In Genoa naphtha is used in the street-lamps.

NAPLES, KINGDOM OF, forming with the island of Sicily, described separately, the "Kingdom of the Two Sicilies," occupies the southern extremity of Italy, being bounded N.W. by the Papal States, and on every other side by the sea. Area 31,600 sq. miles. Population in 1838, 6,021,284. It contains 15 provinces, which are divided into 53 districts, and subdivided into 1790 communes. The government is a hereditary monarchy, with few restrictions.

The territory of Naples, after forming for some space a continuation of the long narrow peninsula of Italy, branches finally into the two smaller peninsulas of Otranto and Calabria. The Apennines fill its interior, shooting out arms to its bounding promontories; in many places spreading wider, and assuming still more rugged and awful forms than in the northern part of their line. They leave, however, along the coast wide plains and extended valleys, blessed with the richest soil, and (except in some marshy tracts on the coast) with the most genial climate of any country in Europe. The rivers are numerons, but inconsiderable in point of size; and from bars at their entrance are impassable except for very small craft.

A stimulus was given to improvement during the French occupation, more especially by the abolition of the feudal system by Joseph Bonaparte in 1806; still comparatively little has been done to develop the great natural resources of the kingdom. In many places property is rendered insecure by banditti, and the great bulk of the people are sunk in a state of huisih indolence. Rock salt, coal, and other minerals abound, but exceely any attempt has been made to work them. Agriculture is in the most rude condition; roads are neglected; and corn (mostly wheat, maine, and rye), wine, oil, silk, flax, hemp, cotton, and fruit, the staples of the soil, might be raised in quantities equal to four or five times the consumption of the inhabitants. A miserable cotton manufactory, a sort of government monopoly established at Salerno, the iron forge and mine at Stillo, the gives and hat manufactories at Naples, with coarsely made linens and cloths, are stated by Mr Macgregor to comprise nearly all the branches of manufacturing industry.

This low state of productive labour, joined to oppressive duries and impolite prohibitions, confines the external trade within comparatively marrow limits. The imports consist principally of cottons, woolens, linens, hardware, and other manufactures; cod-fish and pilchards; coloni

and the Sardinian states.

Naples, the chief port, capital, and emporium of the foreign trade, is beautifully situated on a bay of the same name, in the vicinity of Mount Veuvius, in lat. 40° 50′ N., long. 14° 16′ E. Pop. 350,000. The harbour is formed by a projecting mole, nearly in the form of the letter L, within which the water is from 3 to 4 fathoms deep, but only small vessels can approach the town. The bay is deep, and there is no bar, but it is a good deal exposed to S.W. winds. According to Mr Macgregor (Report, 4c. 1840), the principal exports in 1638 were 5,074,559 gallons olive-oil; 9436 casks wine; 585,657 lbs. cream of tartar; 286,111 lbs. silk; 362 tons argols; 956 tons bones; 10,750 bundles hoops; 744 tons figs; 1780 tons wheat; 1443 tons linseed; 1050 tons hemp; 348,164 pairs gloves; 678 tons liquorice paste; and 636 tons madder root. In the same year there cleared out 127 vessels: whereof Neapolitan, 1051; British, 60; French, 22; and Sardinian, 43. The customs duties amount annually to about £580,100.

The only other harbour on the Mediterranean coast is that of Gaeta; on the eastern coasts are the ports of Barl, Taranto, and Brindial; Gallipoli, the great oil mart, has merely a roadstead.

MEASURES, WEIGHTS, MONEY, BANKS, &c.

Measures and Weights.—The canna or ell of paint or 96 inches = 83°05 Imp. inches; the passo is 74 paint. The Nespolitan mile of 7000 paint = 2018 Imp. yards.

The meggia, land measure, of 900 square passi = 0°8316 Imp. garlons; the carro is 2 botte, or 24 bardii; and the pipe is 14 barlii: the saint of measure, of 16 staja, or 226 quarti = 34°91 Imp. gallons, and weights about 334's lbs. avoird. At Gallipoli, the oil saims of 10 staja or 330 pignatte = 34°11 Imp. gallons. At Barl, the saims = 35°42 Imp. gallons.

The tomolo, corn measure, of 2 meassett or 4 quarti = 15'19 Imp. bushel, or 100 tomoli = 10 Imp. quarters nearly; the carro of 36 tomoli = 664 Imp. quarters posses of 100 rottoil = 196°45 lbs.

The cantaro grosso of 100 rottoil = 196°45 lbs.

Imp. quarters nearly; the carro of 35 tomoli = 684 Imp. quarters.

The cantaro grosso of 100 rottoli = 19645 lbs. avoirdupols; the cantaro piccola of 159 pounds each of 12 oz. = 108·07 lbs. avoirdupols. Gold and silver are weighed by the libbra or pound of 12 ounces, 360 trapesi, or 7900 acini = 4980 troy grains; their fineness is expressed decimally.

Money.—The integer of account is the ducat, sometimes termed dei Reyno, which is divided into 100 grani, each of 10 cavaili; also into 5 tari or 10 carlini. The ducat being equal 3s. 34d., the tari is worth about 8d., the carlin 4d., and the grano 2-5ths of a penny.

The coins, according to the system introduced in 1818, are as follow:—In gold; the oncetta of 3 ducats (weight 36 acini, fineness 966 milliemes). = 10s. 34d. sterling, with pieces for 10, 5, and 2 oncetta in proportion:—In silver; the ducat of 10 carlini (weight 515 acini, fineness 833 milliemes, or \$) = 2s. 34d., with pieces for 12, 6, 5, 4, 3, 2, and 1 carlini of proportional value:—In

is 6 ducate 34 grani, or, as commonly expressed, 6034 grani per £1.

Usance of bills from Britain, Portugal, and Russia, 3 months' date; from France, 8pain, Holland, and Germany, 2 month' date; from Leghorn, Rome, Genoa, and Sicily, 22 days' sight. Inland bills are drawn at 15 days' sight. Bank, 4c.—The Bank of the Two Biclies is a government deposit bank, the orders or checks on which, being paid in cash on demand, circulate extensively in Naples, on the same footing as specie. There is also a government discount office; and most of the principal merchants engage more or less in banking operations.

Finances.—The annual revenue (including a quota of nearly £500,000 from Sicily), amounts to about £4,350,000, derived partly from direct and partly from indirect taxes, the most important of the former being a land-tax of 25 per cert. The principal other sources are customs, tolk, a salt mouspoly, lotteries, and registrations. tolls, a salt monopoly, lotteries, and registra-tions. The whole national debt is estimated at £20,000.000. tions. The w

£30,000,000.
Of the Neapolitan debt, £2,500,000 were raised in England in 1824, on 5 per cent. bonds of £100 each, which were issued at 925 per cent.: the dividend couponds are payable February 1, and Aug. 1, without deduction, at Messrs Rothschild. The other according to the payable of \$500 degrees and \$100 degrees are in bonds of \$500 degrees. The other securities are in bonds of 500 ducats each, bearing 5 per cent. interest; transactions in which, in the London market, take place at the fixed double exchange of fr. 4. 40 c. per ducat, and fr. 25. 65 c. per \mathcal{L} 1.

The Duties on admitted articles are oppressive.

ranging from 50 to 150 per cent. ad valorem, and fact, in point of commercial legislation, Naples agreat variety of foreign commodities are prohibited. The export duties are also very high; among states having any pretension to civilisand the bonding of goods is not permitted. In

NATAL. See Supplement. NATIONAL DEBT. [FUNDs.]

NATAL. See Supplement. NATIONAL DEBT. [Funds.]

NATRON, a native sequicarbonate of soda, found in Egypt, Mexico, &c.

NAVIGATION LAWS, a name commonly applied to those statutes which have for their object the securing of the carrying trade of the country to British-built ships, owned and navigated by British subjects. Some traces of this legislatult are to be found in acts passed by Richard II. in 1381 and 1390; though in general the ancient policy of England seems to have afforded no protection to the shipping by means of exclusive privileges. Bacon, in his Life of Henry VIII., remarks, that "almost all the ancient statutes incite by all means to bring in all sorts of commodities, having for end cheapness, and not looking to the point of state concerning the naval power." That monarch, however, from his "care to make his realm potent at see as well as by land," passed an act in 1485 prohibiting the importation of Gascon wine, except by English vessels; but it did not go the length of excluding foreign shipping in all circumstances: the "stranger's ship." was only to be rejected if the merchant "might have sufficient freight in the same port in a denisen's ship." Yet from this time we may date the commencement of that policy which was matured in an act passed by the Long Parliament in 1651, a famous statute, which, as afterwards confirmed (in 1660) by 12 Ch. II. c. 18, is known by the name of the Navigation Act. It provided generally that no merchandise, either of Asia, Africa, or America, should be imported into England in any but English-built ships, navigated by an English commander, and manned, to the extent of three-fourths of the crew, by Englishmen; and that certain enumerated articles of European merchandise (embracing, it may be remarked, all the bulky and most important productions of the Continent), as well as all Russian and Turkish goods, should not be imported in foreign ships, except such as should be brought directly from the country or place. Besides these exclusive privileges granted to Englis

minating duties, so that goods which might still be imported in foreign sinps from Europe, were in that case more highly taxed than if imported in our own vessels. The Navigation Act was mainly levelled at the Dutch, who, by superior economy and skill, had succeeded in engrossing nearly the whole of the carrying trade of Europe; and there can be little doubt that it dealt a heavy blow at their maritime prosperity; though it does not follow that it benefited the English to the same extent to which it injured their rivals. With the present amount of our knowledge, it would be difficult to arrive at the conclusion that the trade of the country could it would be difficult to arrive at the conclusion that the trade of the country could possibly be promoted by compelling our merchants to employ dear instead of cheap ships. Nevertheless, the system above described was long looked upon as a monuships. Nevertheless, the system above described was long located upon as a mounterment of wisdom and prudence; and the stimulus which it imparted to maritime enterprise is alleged by its admirers to have had the effect of placing the naval power of the country on a far broader and firmer basis than it ever could otherwise have attained. The first deviation from the system sanctioned by parliament was effected by a treaty concluded by Mr Vansittart (now Lord Bexley), in 1815, with the United States of America, which, soon after the establishment of their indepenthe United States of America, which, soon after the establishment of their independence, had followed our example, by enacting a navigation law copied from that of the mother-country; "and it affords," remarks Mr Porter, "an instructive lesson that the practical carrying out of this restrictive system to its fullest extent by the two nations, was found to be so unproductive of all good effect, as to call for its abandonment. By this treaty, the ships of the two countries were placed reciprocally upon the same footing in the ports of England and the United States, and all discriminating duties chargeable upon the goods which they conveyed were mutually repealed. It adds greatly to the value of this concession, that it was made by no disciple of free-trade doctrines, but was forced, by the very consequences of the system itself, from a government strenuously opposed to all change in the direction of relaxation."—(Progress of the Nation, § 3, c. 9.)

In a few years afterwards, the progress both of opinions and of events forced on further modifications of the exclusive system. In 1822, Mr (now Lord) Wallace, then President of the Board of Trade, introduced five bills (3 Geo. IV. c. 41, 42, 43, 44, and 46), which mitigated to a large extent many of the provisions of the law; and in the following year circumstances arose which compelled a still further relaxation. From various causes, foreign countries had up to this time, in

general, submitted to the discriminating duties imposed upon their vessels in our ports, without retaliation. But it now clearly appeared that this forbearance was to be continued no longer. In 1823, Prussia notified, that until an alteration of our system was made in favour of her vessels, similar heavy duties would be imposed upon British shipping that should enter any of her ports; and it was obvious that a corresponding movement would have soon followed in other countries. Our more hants having in consequence become clamorous for the interference of the government to obtain the removal of the retaliatory duties, Mr Huskisson carried through parliament the celebrated *Reciprocity Acts*, 4 Geo. IV. c. 77, and 5 Geo. IV. c. 1. These statutes authorized the crown to permit the importation and exportation of merchandise in foreign vessels at the same duties as were chargeable when imported in British vessels, in favour of all such countries as should not levy discriminating duties upon merchandise carried into their ports in British vessels; also to levy upon the vessels of such countries, when frequenting our ports, the same tonnage rates as are chargeable upon our own vessels. At the same time, the crown was empowered to impose additional duties upon goods and shipping against any countries which should levy higher duties in the case of the employment of British vessels in the trade with these countries. Under these acts, reciprocity treaties were concluded in 1824 with Prussia, Hanover, Denmark, and Oldenburg; in 1825, with Mecklenburg, Bremen, Hamburg, Lubec, States of La Plata, and Colombia; in 1826, with France, Sweden and Norway, and Mexico; in 1827, with Brazil; in 1829, with Austria; in 1834, with Venezuela; in 1837, with Greece, Holland, and Bolivia.

Other relaxations of the navigation laws have been since granted to particular

states by treaty, particularly Austria and the Hanse Towns, for an account of which, we refer to the heads Austria and Lubec; while farther information on the subject of this article will be found under Shipping.

The following is an abridgment of the Navigation Act at present in force:—

Abridgment of an Act for the Encouragement of British Shipping and Navigation, viz. 3 & 4 Wm. IV. c. 54, with the Amendments of later Enactments, viz. 4 & 5 Wm. IV. c. 89; 1 & 2 Vict. c. 113; and 3 & 4 Vict. c. 95.

atl. Act of eqs. 1V. c. 109 and succeeding acts consolidated.
§ 2. The sorts of goods after enumerated, being the produce of Europe, viz. masts, timber, boards, tar, tailow, hemp, fiax, currants, raissias, figs, prunes, olive od, corn or grain, wince, brandy, tobacco, wool, shumae, madders, madder roots, barilla, brimstone, bark of oak, cork, oranges, lemons, linseed, rapeaced, and cloverseed, must not be imported for home use, expet in Eritah ships, or in ships of the country from which the goods are imported.
§ 3. Goods, the produce of Asia, Africa, or America, must not be imported from Europe for home use, except the goods after mentioned, viz.:—Goods, the produce of the dominions of the Emperor of Morcoco, which may be imported from places in Europe within the Straits of Gibraitar; Goods, the produce of Asia or Africa, raitar; Goods, the produce of Asia or Africa, raitar; Goods, the produce of Asia or Africa,

espt in British ships, or in ships of the country of which the goods are the produce, or in ships of the country from which the goods are imported.

§ 3. Goods, the produce of Asia, Africa, or America, nust not be imported from Europe for home use, except the goods after mentioned, viz.:—Goods, the produce of the desninions of the Emperor of Morocco, which may be imported from Burope within the Btraits of Gibraitars, from the Case of the Grant of the Case of Africa, which (having been brought into places in Europe within the Straits of Gibraitar, from or through places in Asia or Africa within the Straits of Gibraitar, from those imported from places in Europe within the Btraits of Gibraitar, from places in Europe within the Btraits of Gibraitar, from places in Europe within the Btraits of Gibraitar, from places in Europe within the Btraits of Gibraitar, from places in Europe within the Btraits of Gibraitar of Maita in British ships.

§ 8. No goods can be exported to any British ships.

§ 10. A similar rule applies to British possession in Asia, Africa, or America, in British ships: bullion, diamonds, pearls, rubles, emeralds, and other jewels or precious stones.

§ 4. The produce of Asia, Africa, or America, in foreign ships, unless these be of the country of which they are the manufacture.

§ 11. No goods can be exported to any British ships.

§ 10. A similar rule applies to British possession in Asia, Africa, or America, in foreign ships, unless they be of the country of which they goods are the produce, and from which they goods are the produce, and from which they are the produce dainy and the produce of the Grant Seignler in Asia or Africa, with in the Braits and the produce of Asia, Africa, or America, in foreign ships, unless these be of the country of which they are the produce, and from which they are the produce, and from which they are the produce of the Grant Seignler in Asia or Africa, with in the Braits and the produce of the Grant Seignler in Asia or Africa, with the Braits and the produce of th

\$ 1. Act 6 Geo. IV. c. 109 and succeeding in ships of his dominions: Raw silk and Mohair acts consolidated. in ships of his dominions: Raw silk and Mohair yam, the produce of Asia, which may be imported from the dominions of the Grand Seignior in the Levant Seas, in ships of his dominions: Bullion. [Authority is given to make treaties with countries on the Mediterranean, that the productions of Asia and Africa may be imported in the ships of such countries, as well as in British ships, 1 & 2 Vict. c. 113, § 20.]
§ 5. Manufactured goods are deemed the produce of the country of which they are the manufacture of the ships of such country of which they are the manufacture.

one part of the United Kingdom to another, or between the United Kingdom and Guernsey, Jersey, Aiderney, Sark, or Man, or from one of these to another, or from one part to another of any one of these islands, or be employed in fish-ing on the coasts of the United Kingdom, or any of these islands, the whole of the crew must

ing on the coasts of the United Aingdom, or of any of these islands, the whole of the crew must be British seamen.
§ 13. But British-built vessels under fifteen tons burthen, wholly owned and navigated by British subjects, though not registered as British ships, are admitted to be British vessels, in all navigation in the rivers and upon the coasts of the United Kingdom, or of the British posses-sions abroad, and not proceeding over sea, ex-cept within the limits of the respective colonial governments within which the managing owners respectively reside; and all British-built vessels wholly owned and navigated by British subjects, not exceeding thirty tons, and not having a whole or a fixed deck, and being employed solely in fishing on the banks and shores of Newfoundland, and parts adjacent, or on the banks and shores naming on the banks and shores or Newhundanan, and parts adjacent, or on the banks and shores of Canada, Nova Scotia, or New Brunswick, adjacent to the Gulf of St Lawrence, or on the north of Cape Canso, or of the islands within the same, or in trading coastwise within the said limits, are admitted to be British boats or vessels,

limits, are admitted to be British BOALS or vessels, though not registered.
§ 14. All ships built in the British settlements at Honduras, and owned and navigated as British ships, are entitled to the privileges in all direct trade with the United Kingdom or the British possessions in America, provided the master produce a certificate under the hand of the activation of the continuous control of the certification of the continuous control of the certification of the continuous control of the certification of

British possessions in America, provided the master produce a certificate under the hand of the suspensions in America, provided the master produce a certificate under the hand of the suspension was been made before him that the ahip (describing the same) was built there, and is wholly owned by British subjects; and that the time of the clearance from the settlements for every voyage be indorsed on the certificate by the superintendent.

§ 15. No ship is admitted to be of any particular country, unless she be of the build thereof; or be a prize of war; or forfeited to the country under a lawfor the prevention of the slave-trade, and condemned by a competent court; or British-built (not having been a prize of war from British subjects to any other foreign country); nor unless the master and three-fourths of the crew are subjects of the country; nor unless the master and three-fourths of the crew are subjects of the country; nor unless the master and three-fourths of the crew are subjects of the country; nor unless the master and three-fourths of the crew are subjects to any other foreign country); in or unless the master and three-fourths of the crew are subjects of the country; nor unless the master and three-fourths of the crew are subjects to any other foreign country. In the provided of the crew are subjects of the country; nor unless the master and three-fourths of the crew are subjects to any other foreign country. In the provided of such country, and however navigated, to be wareful to the subjects of the country; nor unless the piace which are under the dominon thereof. The country of every ship is deemed to include all places which are under the same dominon as the place to which the ship belongs of the act, except British subjects or presons who have served on board ships of wareful to the subject of the country. The act was passed to carry of places within the limits of the Bast India Country. The act was passed to carry of the world of the crew are all the places which are under the dominon are not,

tives, deemed to be British seamen. Every ship Turkish ports on the Danube.] Solves, deemed to be British seamen. Every ship Turkish ports on the Danube.] Solves, the NEEDLES are made from the best steel, reduced by a wire-drawing machine to the suitable diameter. The manufacture, supposed to have originated in Spain, was introduced into England about 1565 by Elias Krause, a German, who then settled in London. At present it is carried on chiefly at Redditch in Worcestershire, Hathersage in Derbyshire, and in and near Birmingham.

Dr Ure states that "the construction of a needle requires about 120 operations; but they are rapidly and uninterruptedly successive. A child can trim the eyes of 400 needles per hour. When we survey a manufacture of this kind, we cannot fail to observe, that the diversity of operations which the needles undergo bears the impress of great mechanical refinement. In the arts, to divide labour, is to abridge it; to multiply operations is to simplify them; and to attach an operative exclusively to one process, is to render him much more economical and productive."—Dictionary of Arts, &c., 886.

NETHERLANDS, KINGDOM OF THE, or HOLLAND, lies between lat. 51° 12' and 53° 28' N., and between long. 3° 20' and 7° 12' E.; and is bounded N.

(except ships required to be wholly navigated by British seamen) navigated by one British seamen (if a British ship, or one seamen of the country of such ship, if a foreign ship) for every twenty tons, is deemed duly navigated, though the number of other seamen should exceed one-fourth,—the act not to affect the laws with respect to trade from and to place within the limits of the East India Company's charter.

§ 17. By royal proclamation during war, foreigners, having served two years on board any ships of war in time of such war, may be declared British seamen within the meaning of the act.

§ 18. No British registered ship must be suffered to depart to or for any British possession in any part of the world (whether with a cargo or in ballast), unless duly navigated. British ship, trading between places in America, may be navigated by British negroes, and shipe trading eastward of the Cape of Good Hope within the limits of the East India Company's charter may be navigated by lascars, or other natives of countries within those limits.

§ 19. The master or owners of ships forfeit for every foreign seaman on board, contrary to the act, £10; but if a due proportion of British seamen cannot be procured in any foreign port, or in any place within the limits of the East India Company's charter; or if the proportion be destroyed during the voyage by any unavoidable circumstance, and the master produce a certificate, make proof of the truth of such facts under the hand of any British consul, or of two known British merchants, if there be no consul at the place where such facts can be ascertained, or from the British governor of any place within the limits of the East India Company's charter; or, in the want of such facts under the hand of any British consul, or of two known British merchants, if there be no consul at the place where such facts can be ascertained, or from the British governor of any place within the limits of the East India Company's charter; or, in the want of such facts to the satisfaction of the col

and W. by the North Sea, S. by Belgium, and E. by Rheniah Prussia and Hanover. Provinces: N. Brabant, Guelderland, N. Holland, S. Holland, Zealand, Utrecht, Friesland, Overyssel, Groningera, and Drenthe. Area, 11,860 sq. miles; and population in 1838, 2,583,271: this is exclusive of the portions of Limburg and Luxemburg subject to the Netherlands crown, the joint area of which is 1738 sq. miles, and population 332,000. Government, a constitutional monarchy: the executive power is vested in the king; the legislative in the king and the states-general, consisting of a first chamber, the members of which are appointed by the king for life, and a second chamber of deputies chosen by provincial assemblies. All new laws are proposed by the king to the second chamber.

power is vested in the king; the legislative in the king and the states-general, consisting of a first chamber, the members of which are appointed by the king for life, and a second chamber of deputies chosen by provincial assemblies. All new laws are proposed by the king to the second chamber.

This country is composed of the lowest part of the great plain of Northern Europe, its level being indeed in many places below that of the sea, against which it is protected,—partly, as in Zealand, Priesland, and Guelderiand, by enormous dikes, and partly, as between the Helder and the Hook of Holland, by sandhills or deser east up by the ocean upon the shores; though, despite every pressuation, it has often suffered greatly from foundations. The whole, saving some slight every pressuation, it has often suffered greatly from foundations. The whole, saving some slight every pressuation, it has often suffered greatly from foundations. The whole, saving some slight every rock, without forests, or, accept in the south part, running waters; the land consisting mainly of moor and marsh, traversed, like net-work, by numerous canals, which, while they are absolutely necessary to drain it, and reader it is for cultivation, asswer, for the most part, the purposes of roads,—many of them indeed being navigable for large vessels. The astonishing ingenuity, industry, and perseverance by which the Netheriands is thus protected against inmodation, and readered at once available for cultivation and internal communication, has been amply rewarded, apparently on the contract of the season of the purpose of roads,—many of them indeed being relative states and the Peel in such periodical and the Peel in the season of the purpose of the purpose of the purpose of the purpose of the purpose of the purpose of the purpose of the purpose, and most powerful in the world contracts. The season of the purpose is the purpose of the purpose, and the Peel in the purpose of the purpose, and the purpose of the purpose, and the purpose of the purpose, and

wards amounts annually to nearly 6000 vessels, having a burden of 800,000 tons; of which, about 330,000 tons were under the national flag; British, 500,000 tons; and Norwegian, 100,000 tons. In 1837, there belonged to Holland 1834 ships, of the burden of 111,834 inst; which was exclusive of 5600 tesk-achury, or canal barges, and 15,000 boats employed in the inland trade. The number of vessels trading to the E. Indies from the different ports is 330, in burden 185,000 tons.

The chief commercial relations are with Java and the other colonies, Britain, Germany, the Baltic states, France, and America. The trade with England appears to be on the increase. In 1833, 1837, and 1840, the declared value of the produce and manufactures of the United Kingdom shipped to Holland, was respectively, £2,131,833, £3,040,039, and £3,416,190: about one-half of the whole consists of cotton yarn and twist; the chief other articles are cotton clobs, wollens, iron, linen and woollen yarn, brass and copper wares, cosl, painters' colours, and sait. A variety of colonial and foreign commodities are likewise imported from Britain; the principal being cotton-wool, coffee, indigo, tobacco, shellac and lac, copper, tea, Peruvian bark, pepper, pimento, and wine. The exports to the United Kingdom in 1840 consisted of 187,802 cwis. butter, 224,807 cwis. cheese, 133,106 cwts. flax and codilla, 47,675 cwts. madeer, 676,640 gallons geneva, 73,843 gallons Rhenish wine, and 171,735 cwts. bark; besides corn, seeds, raw silk, coffee, smalts, nutmegs, and mace from the Moluccas, linseed and repseed cakes and oil, fitch, furs, &c.

Corn forms an item of considerable importance in the commerce of Holland, party from the madequacy of her own supply, and party from the convenient situation of Rotterdam, the chief seat of this trade, as an entrepot for the produce of Rhenish Germany. This port is also, to some extent, a depot for Baltic corn; while, in certain seasons, her shipments of Netherlands produce are considerable,—Lealand wheat, and Dutch oats, be

dues, as well as a tax upon grinding; so that upon the whole the consumption of corn is rather heavily burdened.

Porra—Assistations, the capital of the kingdom, sometimes called the "Venice of the North," is situated in lat. 52° 22° N., long. 4° 55° E., at the confinence of the Amstel with the Y, an arm of the Zuyder Zee. It is built on a marsh upon piles. The principal streets are magnificent, and the city, which is creacent-shaped, is intersected by numerous canals, communicating by 280 bridges, and ornamented with trees. Pop. 290,000. The harbour is capacious and secure, admitting the largest vessels close to the quays and warehouses. At the mouth of the Y there is a bar called the Hampus, to cross which large vessels must be lightened; but this inconvenience, as well as the delays and dangers attending the navigation of the Zuyder Zee, has been, since 1825, obvisted by a ship-canal, 50° luiles in length, and 20° feet in depth, which was then opened between Amsterdam and the Heider,—a noble work which gives to the former all the advantages of a deep-water harbour on the most accessible part of the coast. Amsterdam possesses numerous manufactures, but it is more distinguished for its trade, which, though now much reduced, is still very considerable. The exports, estimated at about £4,000,000 a-year, and the imports, nearly of the same amount, comprehend almost all articles forming the subject of European commerce.

Rotterdom is situated on the Masse, a principal arm of the Rhine, in lat. 51° 55′ N., long. 4° 29° Es, about 29 miles from the North Sea. Pop. 80,000. The streets are intersected by canals, deep enough to receive the largest ships, and the town possesses in other respects, as already notised, great facilities for trade. It has an extensive transit-trade with Germany, and the enders and packets. It will shortly be connected with Amsterdam by railway. In the exports, £5,982,300, including £1,067,260 to Britain.

The chief other ports are Harlingen, at the mouth of the canal of Leewarden, in Frieslan

MEASURES, MONEY, FINANCE, &c.

Measures and Weights.—The modern system, introduced in 1820, is the same as that of France, but with the old Dutch nomenclature.

The elie or metre of 10 palms = 394 Imp. modern early, and 100 elies = 109.36 Imp. yards; the mijle or kilometre = 10934 Imp. yards.

The verkante bunder, or are, of 10 vierkante roedes, or 100 vierkante elies = '02471 Imp. acre = 3 Imp. perches and 29 square yards nearly.

The vat, or hectolitre (lquid measure), of 100 kans or litres = 29.090 Imp. gailons; the kind is divided into 10 mastjes, or 100 vingerhoeds.

The mudde, mak, or hectolitre (dry measure), of 10 schepels, or 100 kops or litres = 23 Imp. bushels nearly; and 100 mudden = 34-390 Imp. quarters.

The wigtje or gramme of 10 korrels = 15-434

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dam ell = 27.08 Imp. inches; the Brabant or Flemish ell = 27.58 Imp. inches. The Dutch league, 19 to the degree, = 3 Imp. miles, 5 fur. 4 poies. 4.98 Amsterdam morgen of 600 square perches, or 4.75 Rhineland morgen, = 10 Imp. acres. The wine stekan of 8 stoops = 4.27 Imp. galls; the brandy stekan = 4.13 do; and the beer stekan = 4.32 do.: The Amsterdam ahm of 4 ankers, 8 wine stekans, 64 stoops, 129 mingels, 256 pintes, or 512 mutjes = 34.16 Imp. gallons; the velte contains 3 stoops, the oxhooid 96, the legger 240, and the vat 6 ahms or 384 stoops; the Rotterdam ahm = 35.32 Imp. gallons. The Amsterdam corn last of 27 mudden, 36 sacks, or 108 schepels = 82.43 Imp. bushels. The troy pound of 2 marks, 16 cunces, 390 engels, or 10340 aas = 7596 troy grains; 1 engel = 78 carats. The commercial pound of 16 ounces = 7625 troy grains; and the centner of 100 lbs. = 108.93 lbs. avotrdupois.

1925 troy grains; and the centiner of 100 lbs. 108-38 lbs. avordupois.

A last for freight is estimated at 4000 lbs., equal to 3 British tons nearly.

Money.—The monetary unit is the florin or guilder, divided into 100 cents, or 20 stivers, and equal ls. 8d. sterling nearly; the par of exchange being in gold 12 fl. 10 c., and in silver, 11 fl. 97 c. pc. £1. Formerly accounts were stated in florins of 30 stivers, each of 16 pfennings; and exchanges were transacted in pounds Flemish of 30 ochillings, or 240 grotes. 6 florins = 1 pound Flemish. The rixdollar = 2½ florins or 60 stivers.

The coins are:—In gold; the 10 florin piece (weight 103-36 troy grains, fineness 900 milliemes or 50, equal 16k čjd., and the piece of 5 florins: In silver; the florin (weight 166-17 troy grains, fineness 383 millièmes) equal 20-06d.; pieces for 3 and ½ florins; also, but of a lower standard, pieces for 25, 10, and 5 cents: In copper; cents and ½ cents. The above form the currency of the Netherlands, according to ordinance of 1816; but a variety of old coins also circulate, the principal being the gold ducat, value 9a. 4d.; the silver ducation, 5a. 33d.; and the rixdollar, 4a. 2d. nearly.

Usanes of bills from London and France, 1 month's date; from Spain, Portugal, and Italy, 2 months' date; from Germany, 14 days sight; and from Dantsig, Riga., and Konigobers, 30 days sight. Days of grace, formeny 6, but now in disuse.

The Bank of the Netherlands was founded in

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in disuse.

The Bank of the Netherlands was founded in 1814 on the model of the Bank of England; the celebrated old deposit Bank of Amsterdam having ceased to exist on the French invasion in 1796. Its original capital of fl. 5,000,000 (divided into shares or actions of fl. 1000) was doubled in 1819. It issues notes, varying in amount from fl. 90 to fl. 1000, discounts bills, and occasionally makes advances on goods, deals in buillion, and coins money for the state.

The Maatschappij, formed in 1825, is a company which has been the means of directing much of the resources and energies of the country to the Eastern trade. The original shares were for fl. 1000 each; and the present capital fl. 97,000,000 (£8,063,333), of which fl. 30,000,000 stand in the name of the abdicated king. It commenced operations by lending fl. 8,000,000 to the colonial government, receiving the consignment of the produce sent to Europe, and exporting European wares to supply the Indian market; and in course of time their advances amounted to fl. 39,000,000. By an arrangement in 1840, the state became bound, let, to pay them fl. 5,000,000 annually for 9 years, by which the debt, with 5 per cent. Interest, would be paid off; and, 2d, to consign all colonial produce raised or bought on government account to their care, for shipment and sale, allowing for this a commission of 4 per cent. Interest, the three rates of interest and commission have been since reduced. nmission have been since reduced.

The government officers deliver the wares to the factory of the company at Java, which contracts to convey them to Europe for a fixed sum. Only Netherlands or colonial shipping can be employed; and their sailing must be so arranged that $\frac{3}{12}$ fall to the share of Amsterdam, $\frac{3}{12}$ to Dordrecht, and $\frac{3}{12}$ to Middleburg. In 1840, the shipping freighted amounted to 138,000 tons.

The council of management consists of a president, norminated by the king. 12 commissaries.

to 158,000 tons.

The council of management consists of a president, nominated by the king, 13 commissaries, elected by the shareholders, and 3 paid directors. The Mastachappij was not at first successful, but it is said to have become so since 1830.

A Treaty of Commerce and Navigation between the Netherlands and Britain, dated October 27, 1837, reciprocally places the subjects of the two powers, in respect to duties, on the footing "of the most favoured nation." It also, "in respect of voyages between the two countries," places their ships as to port-duties, drawbacks, &c., reciprocally on the footing of national vessels. This treaty, which is for the term of 10 years, and 13 months after notice, likewise contains various provisions as to the valuation and warehousing of merchandise, and in regard to wrecks.—See Hertslet's Treaties, vol. v. p. 338.

Provision for the intercourse between the sujects of the two powers in the Bast was made by a treaty, dated March 17, 1824.

Art. 1. Their Eastern subjects to be admitted to trade with their respective possessions upon the footing of the most favoured nation.

2. "The subjects and vessels of one nation shall not pay upon importation or exportation, at the ports of the other in the Eastern Seas. and

the footing of the most favoured nation.

2. "The subjects and vessels of one nation shall not pay upon importation or exportation, at the ports of the other in the Eastern Seas, any duty at a rate beyond the double of that at which the subjects and vessels of the nation to which the port belongs are charged. The duties paid on exports or imports at a British port on the continent of India or in Ceylon, on Dutch bottoms, shall be arranged so as in no case to be charged at more than double the amount of the duties paid by British subjects and on British bottoms. In regard to any article upon which no duty is imposed, when imported or exported by the subjects, or on the vessels of the nation to which the port belongs, the duty charged upon the subjects or vessels of the other shall in no case acceed 6 per cent."

3. The parties engage that no treaty shall be made by either with any native power, which shall, by unequal duties or otherwise, tend to exclude the trade of the others. Intimation to be mutually made of treaties with native powers in the Eastern Seas.

4. The two powers engage to order their officers "to respect the freedom of trade established by art. 1, 2, and 3; and in no case to impede a free communication of the natives in the Eastern Archipelage with the ports of the two governments respectively, or of the subjects of

ed by art. 1, 2, and 3; and in no case to impede a free communication of the natives in the Eastern Archipelago with the ports of the two governments respectively, or of the subjects of the two governments respectively, or of the subjects of the two governments with the ports belonging to native powers."

The Molucca Islands are excepted from art. 1, 2, 3, and 4, during the existence of the spice monopoly; and the treaty, besides, contains several provisions exclusively of a political nature, for which see Hertalet, vol. iii. p. 984.

This treaty is said to have been since violated by the Dutch colonial authorities; and various remonstrances on the subject have been made by our ambassador at the Hagne; but they are of a nature too voluminous to be here noticed.

Finances.—The budget for the year 1842 estimates the receipts at fi. 71, 323, 51; £5,946, 129), and the expenditure at fi. 71, 338, 103, including fi. 33, 431, 341 on account of the public debt. But the brief abstract from which these figures are taken does not show whether the ways and means are confined to the produce of Netherlands

taxes, or include besides new loans or anticipated receipts from the colonies. The mode of preparing the Dutch budgets has of late years been the subject of complaint. The capital of the debt consists of fl. 768,858,300 of old 2½ per cents, and of fl. 382,657,830 of new debt, bearing interest at 34, 4, 44, and 5 per cent, is guaranteed by the state; also of the fl. 5,000,000, stated above as due to the Mastrchard the colonies of the control of the Dutch 2½ per cents is issued form which, fl. 200,000,000, the interest situated to be annually paid by Beigium Treaty, April 19, 1839, art. 13), leaves the debt of Holland on, at Mesurs Schomon's, at the land fl. 951,516,150 (£79,393.019); the present annual charge on which, including the sinkle in London, at Mesurs Schomon's, at the fund, is fl. 33,994,250. This is exclusive of fl. 236,000,000 (£19,666,666) contracted in 1836,

NETS, FISHING, are rarely a subject of commerce, being almost all manufactured by the fishermen and their families.

NEW BRUNSWICK, a province of British America, lies between lat. 45° and 48° 5′ N., and long. 63° 48′ and 67° 53′ W.; and is bounded N. by Canada and Chaleur Bay; E. by Gulf of St Lawrence, Northumberland Strait, and the Isthmus of Chignecto, which separates it from Nova Scotia; S. by the Bay of Fundy; and W. by Maine and Canada. Area, 26,000 sq. miles. Population in 1834, 119,557, chiefly of British origin. The administration is vested in a lieutenant-governor (sub-ordinate to the governor-general of British America), executive and legislative ordinate to the governor-general of British America), executive and legislative councils, and a house of assembly of 28 members.

ordinate to the governor-general of Dritish America), executive and legislative councils, and a house of assembly of 28 members. \$\frac{8}{28}\$

The country, though mountainous towards the north, is mostly composed of bold undulations, sometimes swelling into hills, and again subdividing into vale and lowlands, covered with magnifecent forests, and intersected by the river \$\frac{1}{2}\$ John (the great feature of the province), and numerous other streams, which afford water-communications in every direction to the pleasing astilements scattered throughout the fertile alluvial spots termed fatervales. The climate, similar to that of Canada, is highly salubrious; but agriculture, though recently improved, is in a very backward condition. The most important article of produce is the potato; the cereal grains are not raised in sufficient quantity for the consumption; and indeed the greater part of the country is still in a state of nature. Gypsum abounds; and mines of coal, iron, copper, and manganese are worked, but only to a trifling extent.

The commercial wealth of New Brunswick is as yet therefore limited to its forests, especially those of yellow pine; and under the influence of the discriminating duties in Britain in favour of colonial produce, the industry of the inhabitants is chiefly devoted to the timber trade. This trade is conducted by "immberers," who penetrate the forests at the close of autumn, and during the winter cut down the trees, which are floated down the rivers by the "freshets," or melted snows, about the end of April. A considerable portion of the wood is formed into deal, batters, and shingles; for which purpose there were, on 1st January 1835, 330 saw-mills in the colony, valued at £420,000; but the greater portion is shipped in the log. The chief other branches of industry are the fisheries and shipbuilding. The vessels built are considered by many to be too slight: they are called slop or cabbage-stalk built, having their lower timbers of pine or sprue: their construction, however, cos

West India produce. The above sums, it has to be observed, do not include the transactions with the adjoining colonies. Ports.—Fredericton, the seat of government, pop. 3000, lies on the St John, 85 miles from its mouth, and, being accessible to sloops of 50 tons, carries on a considerable trade. The town of St John, situated near the mouth of the river, is, however, the commercial capital of the province; pop. 10,000. The chief other ports are, St Andrews, at the mouth of the St Crox; Miramichi, Charlam, and Newcastle, in Miramichi Bay; and Dalhousie, in the Bay of Chalsur. St John, St Andrews, and Miramichi are free ports; the two first being also warehousing ports. In 1839, 357 vessels entered outwards, possessing a tonnage of 444,03; whereof Britain, 290,925 tons; British colonies, 118,800 tons; United States, 33,688 tons; foreign states, 638 tond the premium for bills on England fluctuates from about 5 to 18 per cent. The average amount of paper in circulation in 1838-39 was £330,000, consisting of the notes of five local banks and the Bank of British America, and of notes issued by the Corporation of St John.

The public revenue, amounting annually to about £60,000, is chiefly derived from import dutes. The provincial duties are trifling; on British manufactures 24 per cent. is levied, excepting, however, articles required in shipbuilding, machinery, refined sugar, provisions, and books.

NEW FOUNDLAND an island and British ecolony lying in the Atlantic Ocean.

NEWFOUNDLAND, an island and British colony lying in the Atlantic Ocean, E. from the Gulf of St Lawrence. Area, 57,000 sq. miles. Population in 1836,

73,705, mostly of Irish or Scotch origin. The administration is vested in a governor. with executive and legislative councils, and a house of assembly of 15 members.

73,705, mostly of Irish or Sootch origin. The administration is vested in a governor, with executive and legislative councils, and a house of assembly of 15 members. The island is triangular in form, and the shores are rugged and indented. Little is known of the interior, except that it is in some parts hilly, is intersected by numerous lakes and streams, and that the soil is in general rocky and barren, and produces little good timber. The climate is humid, and in winter intensely cold. The importance of Newfoundland is derived solely from the fisheries upon its coasts, and those of the contiguous parts of Labrador, and upon the submarine banks which lie to the S. E.; and the settlements, which amount to 60 or 70, are confined to the shores; the greater part being on the eastern and southern, particularly the former. The principal town and port is \$1 John, situated on the peninsula at the extremity of Avalon, in lat. 47° 33° N. long., 53° 44° W.; population from about 10,000 to 15,000, according to the season. Harbour-Grace, near 8t John, is the chief other trading place: both are free warshousing ports.

The fishery has been already described under the head Cop. The quantities procured and dried in the years 1837, 1838, and 1839, were, respectively, 848,005, 794,161,5 and 865,377 quintals, each of 112 lbs.; the chief other articles of produce in 1839 were seal and cod oil and blubber, 2,244,263 gallons; 437,501 seal skins; 90,506 barrels herrings; and 2922 tierces salmon. The value of the exports amount annually from about £800,000 to £830,000. The agriculture produce being limited to small quantities of potatoes, oats, and hay, the island is almost entirely dependent upon supplies from other countries: Corn and flour are imported from the United States, Germany, &c.; and beef, bread, biscuit, butter, and other provisions, from Ireland and Hamburg. The remaining imports consist chiefly of manifactures, fishing-tackle, cordage, and apparel from Britain; rum, molasses, and sugar, from the W. Indies; and salt fr

NEW GRANADA, one of the three Colombian republics, occupies the most northern portion of S. America, including part of the Isthmus of Darien: it lies between lat. 1° S. and 12° N., and between long. 68° and 83° W.; and is bounded N. by the Caribbean Sea; E. by Venezuela; S. by Ecuador; and W. by the Pacific and Central America. Area, about 380,000 sq. miles. Population in 1836, 1,686,038, partly of Spanish origin, but chiefly Indians, negroes, and mixed races. Departments, Isthmo, Magdalena, Boyaca, Cundinamarca, and Cauca, which are subdivided into 20 provinces. Capital, Bogota, an inland city, pop. 40,000. The legislative power is vested in a congress, consisting of a senate and house of representatives; the executive in a president and vice-president, as in the United States.

sentatives; the executive in a president and vice-president, as in the United States.

New Granada, like the other American states situated within the tropics and penetrated by the Andes, is characterized by great diversities of soil and climate, and consequently of productions. The European cerealia, potatoes, and the aracacha root, are objects of culture on the table-land of Bogots, and in the districts along the western declivity of the Eastern Andes. In the valles of the Magdalena, Cauca, and other great rivers, as well as on the low plains along the coast, maise and plantains are reared as food; while cotton (called in trade Carthagena cotton), cacao, tobacco, and a little sugar, are cultivated as articles of commerce. Timber abounds, and many drugs and dye-woods. Brasiletto and fustic are obtained from the forests which enclose the Sierra de Santa Martha. I peacouanha is collected on the banks of the Magdalena; and cheona on the Andes of Merida and other places. The balsam of Toln is procured on the banks of the Rio Sinu. The plains of Casanare feed large herds of castie, which supply abundance of jets beef and hides. The country, however, is chiefly distinguished for its minerals, which mostly occur on the western declivity of the chains of the Andes. They consist of gold, silver, platina, mercury, copper, lead, iron, and rock-salt. By far the most important is gold, which is more abundant here than in any other country of America. The greater part is obtained by washing auriferous solis in the province of Choca. At the beginning of the present century, the annual produce of gold was estimated by Humboldt at 89,056 marks, value, £890,000; but the troubles consequent on the separation from the dominion of Spain, and the smuggling produced by injudicious commercial regulations and government monopolies, render it difficult to state the extent to which this or the other productions of the country are at present available.

by Humbolat as w,oco manas, value and the smuggling produced by injudicious commercial regulations and government monopolies, render it difficult to state the extent to which this or the other productions of the country are at present available.

New Granada labours under many disadvantages as to trade; the coast districts being marshy and unhealthy; while the inland and healthy regions are so situated that no one can communicate with any of the ports without very great expense, except the valley of the Upper Magdalena, the produce of which is sent down that river to Beanta Martha and Carthagena. This is more especially the case with the valley of the Upper Cauca, the most fertile tract of the republic, which is every where surrounded by high mountains; its produce is mostly sent to Beenavantura, over the Western Andes, some parts of which are so steep that the merchandie has to be carried by men. The produce of the most populous district, the mountainous country of Boyaca, is sent by the river Zulis to the Venezuellah harbours of Maracaybo. In 1835, the total value of the exports was \$2,566,506; and of the imports, \$3,392,655.

Ports on the Atlantic side, Rio Hacha, Santa Martha, Savinalia, Carthagena, and Portobello; on the Pacific side, Chagres, Panama, Choco, and Buenaventura.

Carthagena, formerly considered the great bulwark of Spanish America, is a strongly fortified and handsome city, and the chief naval arsenal of the republic; it lies on a sandy peninsula in the Caribbean Ses, in lat. 10° 25′ Nr., long, 75° 34′ Wr. Pop. 18,000. The port, one of the best and most capacious on the N. coast of S. America, is that whence the packets sail between Colombia

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and the United States and Europe. In 1837, the exports amounted to \$1,799,094, or £369,819; whereof, £340,897 consisted of buillon, mostly gold, shipped in Queen's ships to England.

Santa Martha, about 100 miles N. E. from Carthagena, pop. 8900, has a good harbour and a considerable trade: it exports de-woods, and is the channel through which British mannfactures and other goods are forwarded to the Rio Magdalema. In the year ending May 31, 1838, the exports amounted to \$231,156; and the imports, mostly from British, Prance and the United States, to \$1,200,678; the shipping entered in the same year amounted to 12,196 tons.

The Measures and Weights are the same as those of Spain. The integer of account is the plastre or dollar, divided into 8 reals. At Carthagena and other places prices and exchanges are quoted in ordinary dollars, commonly at the rate of \$5 per £1. The Colombian, or "Macuquina dollar," however, is different; its usual rate of exchange being \$24 or \$5 per £1.

The public Recesses in the year to August 31, 1835, amounted to \$2,337,836, mostly from customs, the tobacco monopoly; and sales of land: the expenditure was nearly of the same amount, but it did not embrace any payments on account of the interest on the foreign debt, explained under Colombia, to which, in 1837, the congress agreed to appropriate one-eight of the import duties, and one-half of the surplus revenues from 1st October 1835, as well as the net proceeds of the tobacco monopoly: various items were at same time set saids for the redemption of the capital, \$5 NEW SOUTH WALES. a British colony, occupying the \$5. P. nart of the

NEW SOUTH WALES, a British colony, occupying the S. E. part of the continent of Australia; the settled portions chiefly embracing the district within 200 miles of the E. coast between Port Macquarrie, in lat. 31° 27' S., and the Murroo River, in lat. 36° S.; and the Port Phillip district on the S. coast. Population in March 1841: males, 35,168; females, 43,558; total, 128,726; whereof 26,976 were transported convicts,—the colony having been originally founded (1788) as a penal settlement. The administration of public affairs is vested in a governor; an executive council appointed by the crown; and a legislative assembly, consisting of 12 members nominated by the crown, and 18 elected by the colonists. The crown originates money-votes: and the colonial revenues are permanently charged with originates money-votes; and the colonial revenues are permanently charged with $\pounds 51,000$ of salaries to judges and public officers, and $\pounds 30,000$ for public worship.

originates money-votes; and the colonial revenues are permanently charged with £51,000 of salaries to judges and public officers, and £30,000 for public worship.

The principal geographical feature of the east coast district is a range of mountains, which, S. of the parallel of 33°, where it is called the Blue Mountains, runs nearly N. and S., at an average distance of 40 or 50 miles from the shore; but at that latitude it declines to the W. until 33°, where it is called the Blue Mountains, runs nearly N. and S., at an average distance of 40 or 50 miles from the shore. This mountaines is distance of 50 or 100 miles from the shore. This mountaines ridge divides the Murroo, Clyde, Shoalhaven, Hawkesbury, Hunter, Manning, Hastings, and other streams, which intersect the E. coast, from the Darling, Macquarie, Lachlan, and Morrumldges, which, rising on its western side, flow for a considerable distance into the interior, until, taking a southerly course, they unite in the Murray, and fall into the shallow lake Alexandrins, contiguous to Baccunter Bay.

The country between the dividing range and the sea is undulating or hilly: the flats, mostly along the shore, are generally of small breadth, though in some places they extend nearly to the dividing range itself. These flats are almost free of timber, and have commonly a poor sandy soil, though abounding with herbage for cattle; but the hilly districts, which, in a few places, as at Newcastle and Port Macquarrie, descend to the coast, are generally better,—the valleys having commonly a strong soil, covered, in its natural state, with a vigorous vegetation, and yielding, when cultivated, good crops of corn. The interior, or western declivities of the Blue Mountain and Liverpool ranges, consist of a series of terraces, having a rich dry soil, admirably adapted for sheep pasture, especially in the districts called Bathurst Plains, Liverpool Plains, and Yass Plains. Beyond the meridian of 145°, these terraces descend to a very low level country, which, as far as explored,

perity has amply justified the discoverer's seu-congratuation of the control of territory located as pasture.

The climate, eminently salubrious, resembles that of Italy, but is drier; the extremes of temperature are also greater, the average heat less, and decreases more rapidly by elevation. The seasons are the reverse of those of Britain,—January being the warmest month, and July the coldest; but frost is rare, and snow never lies in the valleys. The rains mostly occur on the E. coast in May, and in the interior in summer. On the former Fahrenhelt ranges in summer between 35 and 105,—Its mean being 70; in winter, between 27 and 36,—its mean leng 65. The most unfavourable characteristic is the fearful droughts which periodically occur; these are succeeded by excessive rains, which decrease yearly until they again cease; the cycle embracing 10 or 1 years. These visitations will, however, be probably modified as cuitivation is extended.

The vegetable productions are as yet unimportant. The timber, generally of the hard wood kind, is not very valuable; and the trees are rarely so numerous as to impede horse-travelling. The finer fruits, however, have been introduced; and, in 1840, about 3500 gallons of good wine

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were made by some German settlers; the olive also thrives. Almost every kind of corn is cultivated; but owing to the preference given to sheep-husbandry, the supply is insufficient for the consumption. In 1836, the land under crop amounted only to 92,913 acres; whereof 43,069 were in wheat; 36,043 in matics; 3932 in barley; 3767 in cats; and 3893 in sown grasses: the remainder was occupied with trifling quantities of rye, tobacco, potatoes, and millet.

The sheep-farming of New South Wales dates from 1797, when Captan Macarthur, observing the output of the construction of the con

to a vicious credit-system, and mancas excrement in the county, was productive of great embarrasment.

Pours.—Sydney, the seat of government and chief commercial emporium, lies on the E. coast, in lat. 337 517 8, long. 151° 14′ E., on the S. side of the magnificent iniet called Port Jackson, 7 miles from its mouth. Population in 1841, 29,973. It is a free warehousing port. The town is situated partly in a narrow valley, and partly on a slope rising from the shore; and its tastefully laid out shops, well-constructed houses, and numerous government, educational, religious, and commercial establishments, indicate a stirring and flourishing community. It occupies a considerable space, many of the houses having gardens; but nearly two-thirds of its circuit are environed by the coves of Port Jackson. This inite affords excellent anchorage and protection to shipping, and is so deep, that at Sydney the vessels come close up to the wharfs; it is also navigable to Paramatta, 15 miles above. The exports in 1840 amounted to £1,251,244; whereof wood, timber, &c., £563,172; oil and whalebone, £265,290; and goods re-exported, £483,462.

Melbourne, on the S. coast, in lat. 37° 49′ S., long. 145° E., is beautifully situated at the falls of the river Yarra Yarra, a few miles from the bay of Port Phillip. Ships of 200 tons can be discharged at the town, while the largest vessels have secure anchorage and shelter in the roadstead. It is fast rising to great commercial importance, being the outlet of the range of fertile country extending from the seacoast to the Murray, and also favourably situated for intercourse with the other ports of Australia. The exports amounted, in 1840, to £136,650; and the shipping entering inwards to £3,500 tons. It is a free warehousing port. S

Measures, Monwey, Banes, Duties, &c.

MEASURES, MONEY, BANKS, DUTIES, &c.

Measures and Weights, same as Britain.

Money.—Accounts are kept in sterling; and lecoins are almost wholly British, chiefly silthe ordinary currency; though business is mostly

transacted by means of bank-cheques; the mass of pecuniary transactions centring in Sydney.

Bills on London are commonly drawn at 30 or 60 days' sight; and the course of exchange varies usually from about 5 per cent. premium to 5 per cent. discount. Few if any bills are

varies usually from about 5 per cent. premium to 5 per cent. discount. Few if any bills are negotiated on foreign countries.

Banks.—Bank of Australia, founded 1836; Bank of New South Wales, 1827; Commercial Bank, 1834; Union Bank; Sydney Banking Company, and Bank of Australasia. The last, a chartered body, has its head-office in London; the others are colonial joint-stock companies. On March 31, 1841, their aggregate circulation amounted to £222,802; specie, £34,130; and bills and securities held, £2,615,299!

The interest generally allowed by the banks on current accounts is 4 per cent., and discounts are charged at 10 per cent. per annum. The legal rate is 8 per cent.; but 10 to 12½ per cent. is the ordinary rate demanded by individuals; and much higher is frequently given.

Besides banks, there are in Bydney imanca, gas, and a variety of other joint-stock companies.

Duties on spirits distilled from Australian NEWSPAPERS, unless the Roman.

grain, 3a. per gallon; on British or colonial spirits imported from United Kingdom, 7a. 94d. per gallon; all other spirits, 9a. 94d. per gallon. On tobacco, manufactured, 2a. 6d. per lb.; unmanufactured, 1a. 6d. per lb.; unmanufactured, 1a. 6d. per lb. British manufactures, free. Foreign goods, 5 per cent. ad valorosa. Articles, the produce of British India, same as similar articles of United Kingdom or colonies. Revenue.—In 1840, the ordinary revenue was £311,748; whereof £283,000 taxes; £16,000 rents and dues; £17,800 office-fees; £14,000 post office: the crown revenues, from land-sales, quit-rents, licenses, &c., amounted to £339,737; total, £644,483.

The land fund in 1840 (including £4,622 for emigration ship-stores) amounted to £320,957; charges thereon, £189,78; whereof, £29,247 for surveys and sales; £14,716 to aborigines; and £148,315 for immigration: Leaving unapplied, £131,898. In the year to 30th June 1841, the sales amounted at Sydney to £7,667, and at Port Phillip to £182,762; total, £250,419: charges, £34,830; surplus, £215,889. The public land-sales are now (1842) made by auction, at a minisuum price never less than 12s. per acre, instead of the fixed rate of £1s sformerly.

Acts Diurna" can be so called, originated

ance, gas, and a variety of other joint-stock companies.

Duties on spirits distilled from Australian instead of the fixed rate of £1 as formerly. NEWSPAPERS, unless the Roman "Acta Diurna" can be so called, originated in Venice in 1563, when the "Gazetta" first appeared in a written form. The first printed sheet of intelligence is commonly said to have been the "English Mercurie," published in 1588, while the Spanish Armada was in the Channel; but the authenticity of the copies of this paper in the British Museum is doubted; while these (if genuine), as well as the later "Packets of News," were only issued occasionally. Of regular prints, the earliest was probably Butler's "News of the Present Week," in 1622; about which time, likewise, newspapers began to be published on the Continent. During the Great Rebellion, many were spread abroad by the different parties, some interesting notices of which will be found in Mr D'Israeli's "Curiosities of Literature." In 1663, after the Restoration, Roger L'Estrange brought out, "with privilege," his "Intelligencer;" and two years afterwards, the "Gazette" was issued. In Scotland, the first newspaper published was "A Diurnal of some Passages and Affairs," originally printed in London, and reprinted at Leith in 1652; but the first veritten and printed was the "Norwich Postman," 1706, for a penny, but "a halfpenny not refused." Hitherto, the newspapers, though small in size, were generally, in a dearth of news, left in part empty. On such occasions, however, one publisher had recourse to the expedient of filling up with a sufficient portion of the Bible; others,—as the "Flying Post" and "Dawker's News Letter,"—were printed upon writing paper, so that the purchaser might use the blank space for correspondence with his country friends. The first London daily paper was the "Englishman," in which Burke wrote several articles in 1766, they excited comparatively little interest until after 1771, when the Parliamentary Debates were regularly published. The "Letters of Junius," in

readers to "the roll of the leading article."

The newspaper has since become, in this and all free countries, the established medium for the concentration and expression of public opinion; while, by the division of labour, mental as well as physical, assisted by powerful machinery, it is now fitted to satisfy public curiosity, down to the very hour of printing, on all the passing business of life. Of late years this rapidity has been followed up in Britain in every stage of its circulation, through the agencies of the steam-engine and the railroad, so that every pulsation in the heart of the kingdom is felt, with almost electrical celerity, in its remote extremities. Of the commercial importance of newspapers, it is almost unnecessary to speak. The very appearance of our journals, and more especially of those published at the great seaports, with their crowded columns of advertisements,—their announcements of ships departing and arriving from all parts of the world, as well as of all wrecks and casualties at sea,—their elaborate price currents,—and their almost interminable notices of home and foreign markets, stocks, funds, and exchanges, convey to the mind a far more

fercible impression of the utility and value of these vehicles of intelligence to the

fercible impression of the utility and value of these vehicles of intelligence to the merchant, than can be imparted by any language.

The number of newspapers in 1782 was 61, of which 50 were in England, 8 in Scotland, and 3 in Ireland. In 1790, the total number was 114; in 1821, 216; and, in 1832, 369. In 1840, the number was 554; of which 137 were printed in London, 247 English provincial, 73 Scottish, and 97 Irish; the total number of stamps issued being 59,774,037, of which 31,405,243 were issued in London. In 1836, the total number of stamps issued was 35,576,056, which, though 40 per cent. below the year 1840, was nearly double the amount at the commencement of the century.

In 1712, as a remedy against "seditious papers and factious rumours," Queen Anne's government imposed upon newspapers as stamp-duty of a halfrenny. after-

Anne's government imposed upon newspapers a stamp-duty of a halfpenny, after-wards gradually increased to 4d. (with a discount of 20 per cent.); at which rate it continued until 15th September 1836, when it was reduced to 1d. by the act

6 & 7 Wm. IV. c. 76.

ABRIDGMENT OF THE ACT 6 & 7 Wm. IV. c. 76.

it continued until 15th September 1836, when it was reduced to 1d. by the act 6 & 7 Wm. IV. c. 76.

§ 1. Rates of duty: For every newspaper 1d., idenseanor. (7.) Person failing to give declaration and where one side, exclusive of the margin, contains a superficie exceeding 1200 inches, and it contains a superficie exceeding 1200 inches, and for exceeding 2505 inches, id. additional. A supplement not exceeding 250 inches, id. additional. A supplement to exceeding 250 inches, id. additional. A supplement in the exceeding 250 inches, id. additional. A supplement in exceeding 250 inches, id. additional inches, and supplement in exceeding 250 inches, id. additional inches, and supplement in e

newspapers abroad. Officers of stamps authorized to seize unstamped papers without warrant.
§ 19. Where any individual prosecutes for libel, discovery of any person or matter connected with the publication of a newspaper may be enforced by process.

discovery of any person or matter connected with the publication of a newspaper may be enforced by process.

§ 20. Advertisement-duty to be paid within 28 days after the last day of each calendar month, and on ten days' farther delay after notice, stamps to be refused.

§ 21. Copy of each work containing advertisements to be lodged in the London, Edinburgh, or Dublin district within six, in others within ten, days of publication, and advertisement-duty paid, under penalty of £20.

§ 22. On information on oath as to transgressions of the act, and application of officer of stamps, Justice may grant warrant to search premises in the daytime, and if unstamped papers found, they, and all presses and types used for printing them, and others in the same premises, to be seized and forfeited. (23.) In execution of warrant, doors may be broken open in the daytime. Persons obstructing forfeit £20. Peace-officer refusing to act forfeits £10.

§ 24. A printer may deliver notice of his name, address, and place of business, and a list of Newspapers abound in all the British of

periodicals printed by him, renewed quarterly, and notice of each new periodical at its commencement. (28.) Persons adopting this arrangement not liable for any periodical which would require to be stamped, unless published after notice is received from Stamp Office.

§ 96. Actions under the act to be brought before Court of Exchequer, within three calendar months, and after one month's notice. (27.) Penalties to be pursued for before Court of Exchequer, or before Justices where the penalty does not exceed £30. Commissioners may mitigate or stop proceedings.

does not exceed 25th Communicationers may in-tigate or stop proceedings.
§ 28. Justices may convict on evidence without presence of accused, may give warrant for levy-ing penalty and costs by sale, or for incarceration for not more than three or less than one calendar month. Appeal on recognisances and notice lies to next general or quarter sessions. 29-32. Forms of processes and acts repealed. 33. Acts not repealed as to arrears of duties,

§ 34. Where stamps rendered useless by the reduction or change of die, on notice within six months, others substituted to the same amount in value.

Newspapers abound in all the British colonies, even in the youngest, New Zea-Newspapers abound in all the Brisish colonies, even in the journess, and land; to which, indeed, materials for printing a journal were sent with the first settlers. Several have been established in the West Indies by the coloured population as their special organs, and are supported and conducted entirely by this class; while in India, besides those in English, there are many in the native languages. In the United States nearly 100,000,000 copies are annually circulated: they have no tax, and the postage, when they are not sent above 100 miles, is only a cent (ad.); but their circulation is more essentially local than in Britain, owing to the thinness of the population. In the absolute monarchies of the Continent, the press is fettered by a rigorous censorship, and in several other states it is subjected to a modified superintendence: their newspapers are from this cause, as well as the apathy of the people, comparatively small in number, and less occupied with political subjects. In France, however, the amount of periodical journals in 1837 was 776, of which 326, including 27 daily papers, with an average sale of 90,000 copies, belonged to Paris. This is apparently a great excess over Britain; but to make the comparison complete it would be necessary to keep in view our unstamped periodicals; also, that in point of size and "getting up," the best Parisian journals do not equal our ordinary provincial ones, and sink into insignificance when compared with the giant of Printing-house Square. Again, notwithstanding the best French newspapers are said to excel in the comprehensive, sober, and critical application of general principles to political questions, being less biassed by party spirit—the reproach of the British—and especially of the American press, yet they want that species of power which characterizes our daily prints. Thus, though the "Journalism of Paris" is supposed by those conversant with both countries to exercise a greater influence in France than the London papers do in Britain, still out of France the Parisian journals scarcely affect public opinion at all; while, as was proved by the slave-trade agitation, the influence of the London press is felt over the civilized world. [Advertisements.] modified superintendence: their newspapers are from this cause, as well as the apathy

500

was proved by the have-trade agreeton, the induction of the London press is left over the civilized world. [Advertisements.] S
NEW YORK. [UNITED STATES OF NORTH AMERICA.]
NEW ZEALAND. [ZEALAND, NEW.]
NICARAGUA OR PEACH WOOD, an inferior kind of brazilwood, used to dye a bright fugitive "fancy red." About 2500 tons are annually imported from Central and South America

NICKEL, a brilliant white metal resembling silver; ductile and malleable, and capable of receiving a high polish. Sp. gr. 85. It is usually procured from speise, a compound of the metal with arsenic, found associated with cobalt in Germany.

a compound of the metal with arsenic, round associated with cooper it forms argentane or German silver; and is besides used in making mariners' compasses and for other purposes.

NIGRITIA, a term applied by modern geographers to the whole of Central and Western Africa inhabited by the Negro race. It extends from the Sahara or Great Desert on the N. to 16°S. lat., the parallel of Cape Negro; thus embracing Senegambia, Soudan, Guinea, Angola, and generally all countries watered by the Senegal, Gambia, Quorra or Niger, Congo, and other rivers flowing into the At-

lantic within the above limits, as well as those which run into Lake Tchad. Of the interior of this vast region little is known beyond what is furnished by Park, the interior of this vast region little is known beyond what is furnished by Park, Denham, Clapperton, Lander, and other travellers. A trade of some consequence is carried on between it and the Barbary States, as well as Egypt, by means of caravans which cross the Desert; but our information regarding this intercourse is scanty, and not very recent. In the present article, therefore, we shall confine our attention principally to the coast-district, where several of the European nations have settlements.

our attention principally to the coast-district, where several of the European nations have settlements. S

Nigritia, though containing the mountains of Kong and other lofty elevations, may yet be described as upon the whole rather an undulating than hilly region. Being likewise wholly within the tropics, and mostly well watered, it is in general capable of yielding the richest products of the vogetable kingdom. These advantages, however, have been in only a trifling degree improved by agriculture; and, excepting small portions around the towns and villages, the great mass of the country consists of dense forests and jungles, swarming with wild beasts and notious reptiles. The products of culture are chiefly maize and millet, to which in some places are added rice, yams, coffee, sugar, and cotton; but scarcely any of these have been raised for more than native use. As yet, notwithstanding the exertions of Britain, the traffic in slaves forms the grand staple of the intercourse with foreigners. [Salawel] of the commodities which form the subjects of legitimate commerce, the most important is the oil of the palm tree. [Palm Otl.] The chief others are—gold, found principally in the mountainous districts at the heads of the Senegal and Gambia, and in Upper Guines, from whence it is carried down these rivers as well as to the Gold Coast; ivory or elephants' teeth drawn also from the interior; guns, particularly gun-senegal, procured from forests in the half-desert tracts north of that river; also teak and various kinds of ornamental and dyewoods, especially that called cam-wood. These articles are exchanged for European goods,—mostly outtons, arms and ammunition, iron and other metals, spirits, and covines, which last are largely introduced as a medium of circulation.

The principal European settlements,—as the French on the Senegal, the British on the Gambia, and the Portuguese on the Rio Grande,—consist of fortified depôts at the mouths of rivers, from when the principal European officers are kept for the protecti

£162,789; the imports to £59,763, £105,623, and £183,503; and the shipping employed in each year amounted to about 15,000 tons.

Sierra Lone, a colony occupying a peninsula about 450 miles S. from the Gambia; area, 393 sq. miles; pop. in 1839, 39,133, of which, however, only 99 were white. Frectown, the seat of government, is in lat. 8° 30′ N., long. 13° 14′ W. All the West India products have been introduced, and generally succeed, especially coffee; but the exports still consist mainly of timber, palm oil, and cam-wood. The chief imports are Manchester and India groods, provisions, tobacco, spirits, arms, and ammunition. In the years 1837, 1838, and 1839, the exports amounted respectively to £108,365, £64,969, and £58,40; and the imports to £79,478, £31,186, and £103,066. The British likewise possess several islands contiguous to this coast.

Cape Coast Castle, on the Gold Coast, in lat. 5° 6′ N., long. 1° 13′ W., may be considered the scurre emporium between Sierra Leone and the delts of the Niger, for the introduction of British goods in exchange for gold dust, palm oil, and ivory. The chief other British possession on this coast.

FRENCH BETTLEMENTS.—Z. Louis, on a sandbank at the mouth of the Senegal, in lat. 16° 0′ N., long. 21° 11′ W.; pop.15,000, including 800 whites. Its chief advantages are confined to the gum-trade, and the gold-trade with the kingdom of Bambouk, in Upper Senegal; the last being chiefly carried on at Basnock, which, with Podhor, on the Island of Morfil, are the chief other settlements in the river. For navigation the Senegal is far inferior to the Gambia; its ascent, indeed, being only practicable in the wet season from May to October.

Portandic, on the coast, about 140 miles N. from the Senegal, derives its chief if not sole importance from the gum-trade with the adjoining districts.

Considerable excitement has of late years been produced among the British merchants trading to this coast, by their exclusion from Portandic, not withstanding the right guaranteed to them by art. 11

ments.

Albredar, a factory near Fort James, on the Gambia. This possession is disputed by the British, as being in contravention of the treaty above mentioned.

FORTOURSE SETTLEMENTS—Bissos, and other posts in the Rio Grande and adjoining coast.

Angola, at the extreme south of Nigritia, has been already noticed. [Angola.]

DUTCH SETTLEMENTS—BI Mina, on the Gold Coast, 9 miles W. from Cape Coast Castle; also

Axim, on this coast, and some minor posts.

DANISH SETTLEMENTS.—Christianborg Castle, near Accra, and Ningpo, near the B. extremity

AMERICAN SETTLEMENT.—Liberia, a small colony founded in 1821, at the mouth of the Me-

of the Gold Coast.

American Settlement.—Liberia, a small colony founded in 1821, at the mouth of the Mesurado, between Sierra Leone and Cape Palmas, as an asylum for liberated negroes.

Besides the intercourse at these settlements, there is a considerable floating traffic by vessels, which trade along the coast, or enter some of the large rivers, where their cargoes are bartered for produce. This trade, which is of course the only kind carried on in the Gulf of Guinea, between the Gold Coast and Angola, a tract where there are no European settlements, and which includes the fertile and populous countries watered by the embouchures of the Quorra and other large rivers, appears to be nearly as extensive as that conducted at the European settlements. Its great staple is palm oil. According to Mesers Laird and Oldfield, "the best goods for this trade are musicus, powder, red beads, white baft, common scariet cloth, blue beads, bandanas, romals, coarse stuff hats, pipes, tobacco in leaf, and looking-glasses. A punches of oil is termed so many bars, varying according to the state of the market; a gun is six bars; a head of tobacco, two bars; and so on in proportion. Cowries are taken at Eboe, and all up the country." This traffic, however, is subject to frequent interruptions from the slave-trade. "In the Bonny, Calapar, and Cameroon rivers, there are always British hips loading with palm oil and other Africaar, and cameroon rivers, there are always British hips loading with palm oil and other Africaar, but the British reseals is instantly stopped; the cances of the natives are remed and equipped for a marauding expedition to procure the slaves; and until these slaves are procured, no legitimate trade is pursued."—(Laird and Oldfields Africa, vol. II., p. 337.)

The exports of British produce and manufactures to the west coast of Africa, in the three years 1831, 1838, and 1840, amounted respectively to £234,768, £292,540, and £499,128: the last mainly consisting of cotions, £261,297; arms and amnumition, £104,834; i

NITRATE OF POTASH, or SALTPETRE (Fr. Nitre. Ger. Salpeter. It. Nitro. Sp. & Por. Nitro, Salitre. Rus. Senitra. Per. Shorak. Hind. Bajee), a salt composed of nitric acid and potash. It crystallizes in general in six-sided prisms, with striated surfaces, very brittle, has a saline cooling taste. Sp. gr. 1-933. It undergoes no alteration in the air, though it attracts moisture in a saturated atmosphere. On being exposed to heat it fuses, and in this state it is sometimes moulded into little cakes or balls, and called sal prunella. Saltpetre is used for making gunpowder, signal-lights, nitric and sulphuric acids; also for preserving meat. It is besides employed in metallurgy, dyeing, and in medicine. The supply of this country is derived almost exclusively from Bengal, where it exists in the soil, and from which the rough nitre or crude saltpetre of commerce is obtained by lixiviation, orystallization, and evaporation: in this state it generally occurs in brownish broken crystals, more or less deliquescent. It is shipped from Calcutta in bags, each containing 164 lbs.; and the trade has greatly increased since the abolition of the Company's monopoly. From 200,000 to 260,000 cwts. are now annually imported into the United Kingdom. In France, Germany, and Spain, saltpetre is produced artificially on what are called nitre beds. So NITRATE OF SODA, or CUBIC NITRE (Fr. Nitrate de soude. Ger. Würfelsalpeter), consists of nitric acid and soda. It is similar to saltpetre in its properties, differing chiefly in hing more purposet in taste more soluble in cold water.

perties, differing chiefly in being more pungent in taste, more soluble in cold water, more inclined to attract moisture from the atmosphere, and in crystallizing in a rhomboid form. This salt is found in immense quantities in deposits in South America, particularly in the districts of Atacama and Tarapaca in Peru, near to the frontiers of Chili, where it is found sometimes efflorescent, sometimes crystal-lized, but oftener confusedly mixed with clay and sand. Of late years it has been imported in considerable quantities into this country, where it is highly esteemed as a manure for pastures, and indeed for almost all sorts of agricultural produce,

as a manure for pastures, and indeed for almost all sorts of agricultural produce, except that grown upon heavy wet soils. It is also applied to many of the purposes for which nitrate of potash is used, though, being more deliquescent than that salt, it is not adapted for the manufacture of gunpowder. In 1840, 146,928 cwts. were imported into the United Kingdom from Peru and Chili. S NITRIC ACID (Fr. Acide nitrique. Ger. Salpetersaüre), an intensely acid liquid, procured by distilling nitre with strong sulphuric acid. When pure it is colourless; and when most concentrated it has a sp. gr. of 1.5, in which state it contains 25 per cent. of water. It is eminently corrosive, and its taste is sour and acrid. In commerce it is sometimes called acardetic, and generally occurs of a acrid. In commerce it is sometimes called aquafortis, and generally occurs of a yellowish colour, owing to its containing nitrous acid in solution; besides which

it is often highly diluted, and contaminated with sulphuric and muriatic acids, as also with alkaline sulphates and muriates. Nitric acid is used in large quanti-

as also with alkaline sulphates and muriates. Nitric acid is used in large quantities. It is employed in a great variety of chemical processes; in metallurgy and assaying; for etching on iron and copper; in dyeing; and in medicine.

NORWAY, the western section of the Scandinavian peninsula, extends from lat. 58° to 71° N., and from long. 5° to 31° E. Area, 134,309 sq. miles. Population, 1,194,827. It was an appanage of the crown of Denmark until 1814, when, by the convention of Kiel, it was united with Sweden; retaining, however, its own representative body, or Storthing. The executive power is vested in a viceroy and council at Christiania.

by the convention of Kiel, it was united with Sweden; retaining, however, its own representative body, or Storthing. The executive power is vested in a vicercy and council at Christiania. 8

The general aspect of Norway is bleak, rugged, and steril. The shores are iron-bound, and on the west lined by numerous small islands, and indented by bays (*fords*). The interior is mostly covered with a rocky mass of mountains, or lofty plateaux (*folds*); and only about 100th part of the surface is supposed to be productive, though the climate is less reported than that of Sweden, particularly on the coast, owing to the prevalence of venterly winds. The lowest tracts, and those in the surface is supposed to the R and R of the Bay of Drouthelm. In other parts it is confined to the narrow valleys by which the mountain-masses are indented. The land is mostly the property of the farmers, and agriculture is in a rude state: the principal crop is rye, next cats, flax, and potatoes; but the grain raised is insufficient for the consumption. The manufactures are almost wholly domestic; and the internal trade is trifling, owing to the thinness of the population and the defective means of communication. The rivers are numerous, but there course is impetuous, broken, and unift for navigation; though some are in part used to float down timber from the principal timber is pine; the most extentive forests are those covering the eastern declivity of the southern page, called the Norraka Fielen, and the hilly country eastwards; the produce of which is mostly shipped from Drammen, Langesund, Christiania, Christiania, Frederickhald, and other southern ports; being previously, however, cut into balks, beausity exported was \$25,772 last; whereof 64,039 were sent to Holland (24,771 to France; 55,965 to the United Kingdom; and 33,176 to Denmark. Before 1010 the exports to Britain were much breather than the state of the production of the latitar, though much inferior. The late modification of the timber duty, however, by Sir Robert Peel (1849)

MEASURES, MONEY, &c.

Measures and Weights, generally same as Money.—Accounts are kept in species-dollars, Denmark.

NOT

The silver species-dollar = 2 Danish rigsbank dollars = 4s. 5d. sterling; but money is reckoned in the paper of the Bank of Norway. In 1836, the Storthing fixed 115 and 110 paper dollars as the maximum and minimum rates at which the bank could pay 100 dollars in silver; making the value of the bank dollar about 4s. This bank, established in 1816, has its principal offices t Drontheim, with branches at Christiania, Bergen, and Christianiand. The notes for 24 skillings, 60 skillings, and I species-dollar, are printed on white paper; those for 5 species-dollars on blue; those for 10

species-dollars on yellow; and those for \$80 species-dollars on green paper.

There are no gold coins; and although silver dollars, and half dollars, are in circulation, yet for all sums above 24 skillings (9½d.), the value of the lowest bank note, paper money is in general use. The skillenys, or small money, consists of silver pieces of 4 and 2 skillings, and copper coins of 1 and 2 skillings value.

Exchanges with foreign countries are usually effected in banco, through the medium of Hamburge.

NOTICE, in the law of bills of exchange and promissory notes. A holder of a bill is bound to give notice of non-acceptance or non-payment, to any party other than the acceptor or maker, on whom he means to claim for recourse. Want of notice of non-acceptance, however, is no bar to the claim of an onerous indorses, who has taken the bill before it becomes due, and without marks of dishonour. who has taken the bill before it becomes due, and without marks of dishonour. If a conditional acceptance is taken, notice must be given, otherwise the parties may be released. Notice is required, that the drawer and indorsers may take measures, through their transactions with the drawer or otherwise, to secure their remedy in the case of being compelled to take up the bill. It is a presumption of law that damage is occasioned where notice is omitted; and proof to the contrary will not be received. If the bill is for the accommodation of the drawer, and the drawee has no effects of his, and is not otherwise under any obligation to accept or pay, the drawer is not entitled to notice of dishonour. But the nature of the bill, as between the original parties, will not affect the right of an indorses who or pay, the drawer is not entitled to notice of dishonour. But the nature of the bill, as between the original parties, will not affect the right of an indorser who has been an onerous holder, to notice. If the drawee has had any effects of the drawer in his hands, "it would be dangerous and inconvenient, merely on account of the shifting of a balance, to hold notice not to be necessary" (Chitty, 328). It is no excuse for want of notice, where there are effects, that the drawee has explained to the drawer that he would not be able to provide for the bill. Notice explained to the drawer that he would not be able to provide for the bill. Notice from any party accrues to the benefit of every other party, between the person who gives it and him to whom it is given. The notice must bear that the holder intends to claim recourse, and so information of dishonour, casually obtained, or communicated by a third party, will not suffice; but a holder who sends notice to his immediate indorser, may profit by its being conveyed to the drawer if without delay, either directly from that indorser, or from him through another indorser. It is prudent on the part of each party who intends to claim recourse to send notice to every party against whom he thinks he may have any occasion to exercise the right of recourse. In the case of a foreign bill, when the notice is to a party abroad, information should be conveyed of protest having been taken. arty abroad, information should be conveyed of protest having been taken. PROTEST.]

There is no particular form for notice; it is sufficient that both the dishonour and the intention to claim in recourse be distinctly stated. Notice should be sent There is no particular form for notice; it is sufficient that both the dishonour and the intention to claim in recourse be distinctly stated. Notice should be sent without delay; it may be sent immediately on acceptance or payment being absolutely refused, as such refusal is dishonour, though retracted. Where parties reside in the same place, notice of non-payment should be given on the expiration of the day following the refusal; where they reside in different places, it should be posted on such day following. "It is settled that it is never necessary to give or forward notice of the non-payment on the same day when a bill or note falls due" (Chitty, 482). The same rule applies to non-acceptance of inland bills; "but it is now settled that in the case of a foreign bill, notice should be given on the day of the dishonour, if any post or ordinary conveyance sets out on that day; and if not, by the next earliest conveyance" (Chitty, 337). Each party has a day for giving notice, and "he will be entitled to the whole day, though the post by which he is to send it goes out within the day, and though there be no post the succeeding day for the place to which he is to send. Therefore, where the notice is to be sent by the post, it will be sufficient if it be sent by the post of the following day, or if there be no post on the following day, or the day after" (Bayley, 270). Sunday is not counted a day in notices; and the person who receives one on that day is in the same situation as if he received it on Monday. Days set apart by the religion of the individual to be kept holy, seem generally to be held equivalent to Sunday, Good Friday, or Christmas-day, are payable on the previous day. [Grace, Days of.] By 7 & 8 Geo. IV. c. 15, when a bill becomes payable on the day before Good Friday or Christmas-day; it is unnecessary to give notice until the day after such Good Friday or Christmas-day; it is unnecessary to give notice until the day after such Good Friday or Christmas-day; it is unnecessary to give notice until the payable on Saturday, need not be given till Tuesday. By § 2 the same rules are made applicable to days of fasting appointed by royal proclamation. These provisions do not extend to Scotland. In England, by 3 & 4 Anne, c. 9, § 5, to obtain remedy on inland bills for costs, damages, and interest, a protest must be taken and notice sent of it within fourteen days. In extending a similar provision to Scotland, by 12 Geo. III. c. 72, § 41, the terms used were of such a general nature, that the courts decided that notice of dishonour on inland bills may be sent at any time within fourteen days, to preserve recourse. Bills between Scotland and England are not considered inland bills in as far as respects this act. It seems not to be

decided whether the notice ought to be received, or must only be despatched within fourteen days.—(Bell's Com., i. 419.)
Delay to give immediate notice may be excused by the circumstances. The absence of the drawer from his usual place of business and residence, and the sudden Delay to give immediate notice may be excused by the circumstances. The absence of the drawer from his usual place of business and residence, and the sudden illness of the holder, may constitute an excuse; but the absence of the holder, in consequence of the sudden death of a near relative, is no excuse. A holder can only be called upon to use due diligence to discover the party, and if there is any impediment, notice, without undue delay after discovery has been made, suffices. Due care must be taken to provide for the notice reaching the proper person. If the holder knows the particular address of the drawer in a large town, where a letter is not likely to reach him without that address, it should be given in full; but if the address cannot be ascertained, or the party is distinguishable by his mere name and the town in which he lives, notice addressed in such form will suffice. If the party is a bankrupt in England or sequestrated in Scotland, the notice must be given to his assignee or trustee. Notice to a company through one of the partners suffices. When a bill has been drawn by a firm upon one of the partners, it is unnecessary to give notice of dishonour to the firm. If the holder give time, and send notice of non-payment to the drawer, he will not require to give second notice on expiry of the time without payment. An agent employed to present a bill is responsible to his employer for neglect of notice. Notice may be held as received by the party entitled to it. Payment of a part, promise to pay or to see paid, a promise "to set the matter to rights," &c. have been held to amount to a waiver. If a person has made a promise to pay, without having had notice, it is now held as a waiver of that notice, though he made the promise in ignorance of his right to found on want of notice, provided there is no fraud in the case. In promiseory notes, the only parties to receive notice are indorsers.—(Bayley on B., 252.313. (Abitty on B., 9), Adition, 327.343, 433.506.)

or mis right to found on want or notice, provided there is no trade in the case. In promissory notes, the only parties to receive notice are indorsers.—(Bayley on B., 252-313. Chitty on B., 9th edition, 327-343, 433-506.)

NOVA SCOTIA, a province of British America, consisting of a peninsula of irregular shape, connected with New Brunswick by the narrow 1sthmus of Chignecto, and lying between lat. 43° 20′ and 46° N., and long. 61° and 66° 20′ W. Area, 15,617 sq. miles. Population, in 1838, 154,991, mostly of British origin, but including likewise a number of settlers of French descent, called Acadians, some negroes, and a few aborigines. The administration is vested in a licutenant-governor, a council of 12 members appointed by the grown, and a house of assembly ernor, a council of 12 members appointed by the crown, and a house of assembly of 41 members, elected by 40s. freeholders. S

of 41 members, elected by 40s. freeholders. \$3\$

The aspect of the shores is bleak, and in many parts rugged. The surface of the interior consists mostly of bold undulations, but there is no considerable elevation, the highest land (Ardoise Bill), near Windsor) being only \$10 feet above the sea. A considerable portion is occupied by lakes; and the soil is not generally fertile, though there are some rich tracts on the banks of the rivers and at the heads of the bays. The finest districts are Annapolis and the other counties adjoining the Blay of Fundy, the most productive and best settled portion being the counties adjoining the Blay for Fundy, the most productive and best settled portion being the counties adjoining the Blay for Fundy, the most productive and best settled portion being the counties adjoining the Blans Beain; but the most important part is the district of Halifax, the capital on the opposite side, which communicates with the preceding by a canal and the river Shubenacatic. The climate is mild and salubrious; oats, rey, and bearley, are the principal objects of cultivation; wheat is also raised in choice situations, though not in quantities sufficient for the consumption; and there are numerous orchards; but grazing is the clief branch of agricultural industry, and for which, indeed, the province is best adapted from its hilly surface and copious irrigation. A large portion of the country, however, is still covered with forests, which, under the stimulus of the discriminating duties imposed by the mother-country in favour of colonial produce, leads here, as in New Brunswick and Canada, to the industry of a considerable portion of the inhabitants being directed to the timber-trade. The wood is shipped mostly in the form of deals, battens, boards, planks, shingles, and staves, to convert it into which affords employment, as in the other provinces, to numerous saw-mills. The cod-fishery is also prosecuted extensively by the colonists. Another important branch of industry is that of mining. Coal and

sther articles consisting of cattle, seal-skins, furs, beef and pork, and reshipments of tropical produces. They are sent mostly to the West Indies, United States, and Britain. The imports in 1834 and 1837 amounted respectively to £703,917 and £790,755; mainly composed of wheat and flour from the United States and Germany, British manufactures, and West India produce. The preceding valuations, it has to be observed, do not include the trade with the adjoining states of British America. About 4000 vessels, having a tonnage of 330,000, arrive annually; and there are about 100,000 tons of shipping belonging to the provinces.

Ports.—Halfax, the chief port and capital, is situated on the S.E. side, in lat. 44° 39′ N. and long. 63° 37′ W.; pop. 20,000. Being directly open to the Atlantic, and its navigation scarcely ever interrupted by ice, it is our chief naval station in N. America, and affords secure anchorage for 1000 ships. It is entered by a creek 16 miles long, which terminates in a sheet of water called Bedford Beain, and is every where strongly fortified. Pictou, the port next in conseque, is situated on the N. coast; it carries on a considerable trade in lumber and coal. Both are free warehousing ports. The other places frequented by shipping are Yarmouth, Liverpool, Lunenburg, Windsor, Parborough, Cumberland, Shelburne, and Digby.

Money, Dutter, 4c.—Accounts are kept in pounds, shillings, and pence sterling; in the same denominations in a nominal currency explained in the article Camada; or in dollars and cents. The circulating medium is composed partly of British and America coins, and partly of notes issued by the Treasury, and by a branch of the Bank of British and several local ones. The provincial revenue (exclusive of local assessments) amounts annually to about £60,000, derived principally from excise and customs: both are moderate,—the general rate of import duty on British manufactures being 25 per cent. The crown duties, levied only on foreign goods, are explained in the article Colonvy

Cape Breton Island, with those in Nova Scotis, are let to the General Kining Association. NUTMEG (Du. Muskaatnooten. Fr. Noix muscades. Ger. Muskatenusse), a spice yielded by the fruit of a tree (Myristica maschata) indigenous to the Molucca Islands, which begins to bear when 10 years old, and goes on improving during the space of a century. The fruit, which is singularly beautiful, is pear-shaped, about the size of an apricot. As it ripens, the rind, which is nearly half an inch thick, and of a whitish colour, opens and displays the nutmeg in its black and shining shell, encircled by a net-work of scarlet Macs. It is gathered three times a-year. In preparing it for use, the mace is first stripped off, and the nutmeg, after being dried, is deprived of its shell, and soaked in sea-water and lime, in order to preserve it from insects, and, by closing its pores, to prevent its strength from eraporating. Three sorts are distinguished; namely, the male or barren, the royal, and the queen. The last, which are small and round, are preferred to the others, which are large and oval. Nutmega are solid, unctuous to the feel, of a gray-brown colour, reticularly furrowed on the outside, and within yellow, variegated with brown undulating lines; odour fragrant and balsamic; taste warm gated with brown undulating lines; odour fragrant and balsamic; taste warm and aromatic. They should be rejected when worm-eaten, light (from the oil being expressed), musty, or variegated with black lines. The active part, however, is confined to the dark-coloured veins, which are not apt to be worm-eaten. Dry lime forms the best kind of package for this spice.

The Dutch East India Company possess a monopoly of the spices of the Moluccas; and by their avaricious policy, the cultivation of the nutmeg-tree is confined to Banda-Neira, Way, Run, and Gounong. In all the others it has been carefully extirpated, because, being at a distance from the seat of government, they were supposed to afford better opportunities for smuggling. The tree has been introduced into Sumatra, Mauritius, and other parts of the East; attempts have also been made to introduce it into Cayenne and Trinidad; but the greater expense attending its cultivation in these places has hitherto prevented any reduction of the monoroly cultivation in these places has hitherto prevented any reduction of the monopoly prices charged by the Dutch. About 120,000 lbs. are annually entered for consumption in the United Kingdom. S

sumption in the United Kingdom. S
OIL OF NUTMEO.—This spice contains a fixed or solid oil, and a volatile oil; both of which are used for medical purposes. Of the former there are two varieties: the English, which is the best, occurs in pieces of about \$\frac{1}{2}\$ lb. in weight, wrapped in leaves of the banana; it has a uniform reddish yellow colour inside: and the Dutch, in larger pieces, wrapped in leaves or paper, and of a lighter colour. All kinds are frequently adulterated.

NUTRIA, or NEUTRIA, an aquatic rodent little quadruped (Myspotamus coppus), inhabiting S. America, especially Chili, Buenos Ayres, and Tucuman; it is valued on account of its fur, which, like that of the beaver, is of two kinds,—the long ruddy hair, and the brownish ash-coloured fur at its base. The latter is now largely used in the hat manufacture; and about 220,000 skins are

for this purpose annually imported into the United Kingdom from the States of

NUX

for this purpose annually imported into the United Aingdom from the States of La Plata. S

NUTS, HAZEL (Fr. Norsettes, Avelines. It. Naccinole, Avelane. Sp. Avellanas), produced by different species of coryli or hazel-trees [Filder]. They are common in this country, but the best are brought from the S. of Europe, principally Spain. About 150,000 bushels are annually imported. S

NUX VOMICA, the fruit of the Strychnos nux vomica, a tree indigenous to Mahabar, Coromandel, and Ceylon. When ripe, it is about the size of an apple, is covered with a shell of an orange colour, and contains a pulp in which from three to five seeds are immersed. These seeds are round, flattish, and about \$\frac{1}{2}\$ inch in diameter have a weak naneous halsaming smell, an intense bitter taste, and contain a diameter, have a weak nauseous balsamic smell, an intense bitter taste, and contain a virulent poison. They are used in medicine, and have, it is said, been employed in brewing porter, though their use for the latter purpose is prohibited by statute. S

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OAK (Fr. Chêne. Ger. Eiche. It. Quercia. Por. & Sp. Roble), a genus of trees (Quercus) embracing about 150 species, two of which, common in our forests, excel all the others in the production of timber. The common British cak (Q. pedunculata), "the father of ships," that which chiefly abounds in our island and the N. of Europe, is distinguished by having the acorns on footstalks: the sessile-cupped cak (Q. Sessiffora) bears the acorns without footstalks, but has the leaf-stalks longer than the other; it is found chiefly in the W. of England, N. Wales, and the S. of Europe. The best oak is said to be that which grows in cold or elevated situations (if not stunted), on stiff, clayey soils, and is the longest in arriving at maturity. The common species is of slower growth than the sessile-cupped, and is commonly preferred to it; but there is great difference of opinion as to which is really the best; much seems to depend on the soil and health of the individual tree. The "unwedgeable and gnarled oak," when cut down at a proper age (about 60 years) is superior to all other timber in point of strength, durability, and general application. It is eminently adapted for shipbuilding, particularly warvessels, from its not splintering by shot. It is not grown in this country sufficient for the consumption; and large quantities are imported, especially from Prussia and Canada. The kinds principally used in the Royal Dock Yards are Welsh, Sussex, and Baltic,—the last being the most esteemed of the foreign kinds: the Adriatic, formerly much used, has turned out ill. In domestic architecture oak is only used in the largest and best buildings; occasionally for the principal beams; but its chief use is for door and window frames, sills, sleepers, king-posts of roofs, trussing for girders, sashes, gates of canal-locks, sluices, posts, and piles.

The white oak (Q. alba) of the United States is the kind chiefly used there for shipbuilding, houses, and liquor-casks; it is also imported into Britain. But the live oak (Q. virens), a

land, the black oat is the favourite kind in mountainous districts. The white oats, though less hardy and requiring a better soil, are yet earlier and heavier than the others, and are generally preferred, especially the subvariety called the potato oat, now almost the only kind cultivated on good land in England, the Scottish Low-lands, and Ireland. The seed-time of oats is March and April; four to six bushels are sown on an acre; and the produce varies, according to soil and preparation, from about 30 to 70 bushels per acre. They weigh from 35 to 45 lbs. a-bushel; yielding about 8 lbs. meal for 14 lbs. corn. Drought and heat are unfavourable to this grain, rendering it husky and tasteless. The nutritive quality of oats is smaller in a given weight than that of any other of the cerealis; but they are admirably adapted for the feeding of horses, the purpose to which they are principally applied; though, when ground into meal, they are also largely consumed as food by a great

portion of the population of Scotland, the N. of England, and Ireland. The best cats are those of Scotland and Friesland in Holland. [Corn.] B OCHRE, a native earthy mixture of alumina, silica, oxide of iron, and other substances, found in beds in various places, particularly in England at Shotover Hill near Oxford, and in Italy. It is generally of a yellow or brown colonr, but is sometimes reddened by calcination. It is prepared for use by grinding and elubriation; and is employed as an ingredient in painters' colours, and in the polishing of metals and stones. Nearly 5000 cwts. are annually imported. B OIL, a substance expressed or distilled from certain vegetable and animal matters, the distinctive characters of which are inflammability, insolubility in water, and (except palm oil and a very few others) fluidity in moderate temperatures. Oils

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are either fixed or volatile.

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Fixed Oils—Vegetable fixed oils are usually contained in the seeds of plants; though oilve oil is extracted from the pulp which surrounds the stone. They are procured by bruising the seed, and subjecting the pulpy matter to pressure in hempen bags, a gentle heat being generally employed at the same time to render the oil more liquid. They are commonly of a thekish consistence and unctuous feel, and differ from volatile oils in leaving a greacy stain on paper which cannot be removed by heat alone. They are sometimes colouriese, occasionally of a greenish or yellowish hue, when pure semitraneparant, with little smell, and a mild taste. They are insoluble in alcohol, and their specific gravity varies from 90 to 96. When kept for some time they become rancid; and, when exposed to air, gradually increase in consistence, till at last they become solid. Those which retain their transparancy after they have become solid,—as linseed, nut, poppy, and hempseed,—are called drying cile; while others which assume the appearance of talkow or wax, and become opaque,—as olive, almond, rape, and been,—are called datois. The former are mostly used for paints, varnishes, and printers ink; the latter are consumed as food, in medicine, soapmaking, and other branches; several of each kind being likewise extensively employed in the arts, and in the lubrication of machinery.

Animal oils, derived from the fatty matter of the whale, cod, seal, and others, are very analogous in composition and properties to the vegetable fixed oils; and in Britain, where the latter are comparatively expensive, the former are employed, both for the purpose of giving light and for the manufacture of soap.

VOLATILE OF ESERVIAL OIL occurs in all odoriferous plants. It is found in all parts of them, and sometimes different in different parts of the same plant. It is the odoriferous principle of vegetables; but its quantity is not always in propo

OKE, a Turkish weight equivalent to 2½ lbs. avoirdupois nearly. OLDENBURG, a German state composed of the duchy of the same name, bordering on the N. Sea, and on the land side contiguous to Hanover, Bernem, and the weser; and the small principalities of Lubeo and Birkenfeld. Total area 2440 sq. miles. Pop. 269,000. Government monarchical, without any assembly of estates.

The country is level, and the soil in general poor. Agriculture and cattle-rearing are the chief occupations of the people. Exports, oxen, horses, linen, leather, beer, hides, rags, &c., chiefly to Holland and the Hanse Towns, especially Bremen. In 1836, Oldenburg joined in a commercial league with Hanover and Brunswick. [Bremen. Gramany. Prusso-Graman Cuproms

OLIBANUM OR FRANKINCENSE (Fr. Encens. Ger. Weihrauch. censo), a gum-resin procured from a plant (Bosvellia Thurifera, Roxb.) found in the mountainous parts of India. Two qualities are distinguished: olibanum in grains, and common olibanum. The first occurs in small roundish pieces of a light yellowish colour, very brittle, and semi-transparent; taste acrid and slightly bitter. The second is in larger pieces, mostly of a dark colour, and mixed with impurities. The odour of olibanum is balsamic, and it burns with a clear light, diffusing a fragrant smoke. It is used principally as incense in Roman Catholic churches, and though rarely in medicine. churches, and, though rarely, in medicine.

An Arabian kind of olibanum, formerly imported from the Levant, is now seldom met with, and its origin is a matter of doubt. In America, various trees yield

substances analogous to olibanum, and used in a similar way,

OLIVE, the fruit of a tree (Olea Europæa), a native of the south of Europe and north of Africa, and extensively cultivated in France, Spain, and especially Italy. It is a small, green, oval berry, containing a double-celled nut. Olives, when fresh, have a harsh, bitter, and extremely disagreeable taste; and they are eaten only after having been steeped for several days in a ley of wood-ashes, and then

fresh, have a harsh, bitter, and extremely disagreeable taste; and they are cavelly only after having been steeped for several days in a ley of wood-ashes, and then pickled in a strong solution of muriate of sods. Flavoured with some spice, they are occasionally used after dinner in Britain, but more abundantly on the Continent, to improve the flavour of certain wines. Olives are principally imported into this country from France, in barrels of 28 gallons, and from Spain, in jars of two gallons. An allowance of \(\frac{1}{2} \) to \(\frac{1}{2} \) is made at our custom-house for pickle. This fruit is, however, chiefly valued for the oil obtained from it.

The matured wood of the olive is hard, compact, and reddish in colour. It takes a fine gloss, and is made into souff-boxes and trinkets.

OLIVE OIL (Fr. Huile d'olives. Ger. Baumöl. It. Olio d'uliva. Por. Oleo das assistonas. Sp. Accite de accitunas), the lightest of the fixed oils, is derived from the fruit on its arriving at maturity in November. The olives are first crushed in a mill, care being taken that the millstones are so placed that they may not break the nuts. The mass being then put into bags, and subjected to moderate pressure in a screw-press, yields a considerable quantity of virgin oil, of superior quality. After this is completely expressed, the mass, stones and all, is either returned to the mill, and the stones are broken, or the same effect is produced by mixing up the whole with boiling water, and increasing the power of the press. By this means the common kind of oil is obtained; while, by repetition of the process, an inferior sort is procured, valuable for the preparation of scap. Virgin oil is of a very pale yellowish-green colour; inodorous when fresh, but emitting By this means the common kind of oil is obtained; while, by repetition of the process, an inferior sort is procured, valuable for the preparation of soap. Virgin oil is of a very pale yellowish-green colour; incodorous when fresh, but emitting a peculiar smell when old; taste bland and purely oily, but becoming in time alightly rancid: it congeals at 38° Fahrenheit. Sp. gr. '915. The common kind is of a brownish-yellow or greenish colour, and a taste or odour in a greater or less degree subrancid. Olive oil, being high priced, is frequently adulterated with cheaper kinds; but the fraud is known by a less tendency to congeal by reduction of temperature. This oil, in the countries of production, is an important article of subsistence to all classes; and it is also employed to burn in lamps. In our country, as food, it is used almost solely in cookery and for salads as a luxury; but considerable quantities are employed in the making of fine soap, in the woollen manufacture, and in other arts. In medicine, it is used as an emollient, and to form cerates and plasters.

Olive oil is prepared in immense quantities in Italy, especially in the provinces

and plasters.

Olive oil is prepared in immense quantities in Italy, especially in the provinces of Apulia and Calabria in Naples, the produce of which is largely exported from Gallipoli, the principal oil-mart of the peninsula: this kind is of fine quality, a distinction partly due to the influence of the tufa cisterns in which the oil is purified at this port before being shipped. The Florence and Lucca oil shipped from Leghorn is likewise in high esteem. The Sicilian kind is generally of low value. Olive oil is also largely produced for exportation in Spain. In France, the best is made in the provinces of Languedoc and Provence, the finest being that of Aix. About 2,000,000 gallons are annually imported into this country for consumption, chiefly from Italy and Spain, and in smaller quantities from Portugal, the Ionian Islands, Turkey, Barbary, and France. 8

The customs tere, when imported in Jars, is \(\frac{1}{2} \) for each jar, and \(\frac{1}{2} \) for foot or sediment; a

The custome tare, when imported in jars, is } for each jar, and } for foot or sediment; a chest contains 60 flasks = 21, Imperial gallons. [OIL.]

enest contains 60 masts = x₁ imperial gallons. [OIL.]

ONION (Fr. Oignon. Ger. Zwiebel. Por. Cebola. Sp. Cebolla), a well-known biennial plant (Allium cepa), having a bulbous root varying in size according to the kind, soil, and cultivation. The small are more pungent than the large; and those which have a tinge of red or purple, than those which are white. The "Strasburg" and its varieties are the hardiest in this country. But our onions are surpassed by those imported from Portugal, Spain, and the south of France, which are much larger, and more mild and succulent. Onion seed is also imported in large ounntities.

which are much larger, and more mild and succulent. Union seed is also imported in large quantities. So ONYX, a species of agate, in which the siliceous particles are arranged in alternating horizontal layers of opaque white and translucent blue gray or brown. It is employed for cameos, the figure being cut out of the opaque white, and the dark part forming the ground, or the contrary. It is most valuable when the contrast of colours is strong, and when the layer is thick enough to give a high relief to the object to be engraved.

OPAL: a heartiful precious stone of which there are many varieties. So, or

OPAL, a beautiful precious stone, of which there are many varieties. Sp. gr. 209. The most valuable is the noble or precious opal, of a white, bluish, or yel-

lowish white colour, and when viewed by transmitted light, yellow. It exhibits brilliant and changeable reflections of green, blue, yellow, and red,—a play of colours which has not been satisfactorily explained. It is translucent; fracture conchoidal; with a resinous lustre; easily broken, but scratches glass. Its chief localities are, Czervenitza in Hungary, the Farces, Saxony, and at Gracias a Dios in Honduras, whence it has been brought in specimens of considerable size and of great splendour. This kind of opal is sometimes called the Nonnius opal, from the senator Nonnius, possessor of the famous opal of Rome, worth 20,000 sesterces, who preferred banishment to parting with it to Antony.

The common opal differs from the precious chiefly in wanting the play of colours; it is found at the Giant's Causeway and the Hebrides. A variety has been met with in India; and Mr Milburn states, that a beautiful Oriental opal is worth double the price of a sapphire of the same size. They occur from the size of a pin-head to that of a walnut; but a fine stone of this last size is extremely rare and precious. Much care is necessary in purchasing them, as there are many counterfeits.

OPIUM (Fr. Opium. Ger. Mohnaqt. It. Opio. Arab. Mal. Utyson. Pers. Sheerikhaskash. Hind. Ufeem. Turk. Madjoon), a narcotic drug, composed of the inspissated juice of the unripe capsules or fruit of a species of poppy (Papsver somniferum) extensively cultivated in Asia; also to some extent in European countries, principally for the oil of its seeds. The juice is collected in a pot, and worked into masses or cakes, which are covered with leaves, to prevent their sticking dispet,—Turkey and East India.

Turkey or Smyrna opium, so called from the place of shipment, is compact; at first, softish and reddish brown, but becomes hard and blackish; lustre waxy; smell heavy and disagreeable; taste at first nauseous bitter, afterwards acrid, and rather warm; highly inflammable; and when good, not entirely soluble in water. Sp. gr. 1336. The best is in fl

commonly the subject of British commerce.

East India opium is less compact and softer than Turkey; also darker, fainter in odour, less bitter, and more nauseous and weaker; containing less month. But this inferiority is fast disappearing; and, of late, that manufactured in some districts is of the finest quality. It is produced almost exclusively within the Bengal presidency, and in Malwa in Central India. In the former, the cultivation of the poppy is confined to certain districts within Benares, and in Bahar near Patna, and in Bahar near Patna, and in Bahar near Patna, and in Bahar near Patna.

the poppy is confined to certain districts within Benares, and in Bahar near Patna, in order to secure the monopoly of the Company, who purchase the crop from the ryots, at the price of 1½ rupee per pound, and afterwards dispose of it at stated public sales in Calcutta. At the sale of February 1840, the upset price was Ra 400 per chest (of 2 factory maunds, or 149½ lbs. avoird.); but the rate paid at different times is of course subject to variation. In Malwa, which belongs to native rajahs, the trade is free. The Company made great exertions to procure the whole of it by treaty; but, in 1830, they relinquished this object, and agreed, for a transit duty of Rs. 125 per chest, to grant passes for its conveyance to Bombay, from whence this kind is wholly exported.

Opium is chiefly employed with us as a sedative medicine. But as the drug, when taken in small dozes by those unaccustomed to it, communicates a peculiar kind of exhilaration and energy to the mind, as well as a pleasurable condition to the whole system, accompanied with increased capability of exertion, it is largely consumed in the East in much the same way as wine and spirits are taken in Europe. By degrees, as the habit becomes confirmed, the craving increases, and to produce the desired feeling, the dose must constantly be augmented, till at length,—each excess being followed by depression and torpor,—equal injury is produced as by habitual dram-drinking. In Turkey and Persia opium-eating, once very common, is on the decline, owing to the less rigid observance of Mohammed's injunctions against inebriating liquors; but in China the use of it is on the increase. In the against inebristing liquors; but in China the use of it is on the increase. In the last country, however, it is smoked, a custom less pernicious than eating, owing to the preparation which the drug has to undergo before being fitted for the pipe. Indeed, taken in moderation in this way, it is said to have no bad consequences; and in regard to China, it may be observed, that opium debauchees do not appear to be more common there than drunkards in other countries

The drug was formerly imported into Britain solely from the Levant, but, owing to the improved quality of the Indian produce, a portion of our supply is now made

up of the latter. The amount of foreign and Indian opium entered for consumption in 1851 was 46,736 lbs., having nearly doubled within 10 years. This trade, however, is insignificant when compared with that which has grown up between India and Chins. Before 1800, the quantity sent to the latter was inconsiderable; and in the year 1817-18 did not exceed 2,455 chests, in value \$2,951,100; but in 1852-33 it was sugmented to 23,693 chests; namely, 6,410 Bahar or Patna; 1,880 Benares; and 15,403 Malwa; the total value being \$16,5352,429, or (estimating the dollar at 4s. 2d.) £3,198,422: So that in 15 years the quantity had increased about tenfold, and the value between five and six fold; the average price, meanwhile, having declined from \$1,212 to \$447 per chest, nearly one-half. This was exclusive of about 1000 chests Turkey opium, re-exported from Britain to China. The trade has since been further extended. In 1837-33 the quantity of Bahar and Benares opium exported was 19,307 chests, valued (in Calcutta) at £2,114,025; and nearly the same amount was fixed for exposure at the government sales in 1840. Of Malwa, passes were granted in the three years ending 1837-38 for 45,817 chests, or, on an average, 15,106 a-year. Hence, the total annual export from India, when war broke out in 1839, must have been about 35,000 chests, in value nearly £4,000,000; which, excepting small parcels sent to the Malay Peninsula. Eastern Islands, and England, was shipped wholly to China. The net revenue derived from the monopoly in Bahar and Benares in the three years ending 1839, was Ra.3,46,96,196; and for transit passes from Malwa to Bombay, Rs.60,49,230; total, Ra.4,07,45,426. (Par. Paper, 1841, No. 22.) This gives, on an average, the net yearly revenue of the Company from the dry Rs.1,35,81,808, equal £1,273,296 sterling.

The opium-trade, though forbidden so early as 196, attracted little notice from the Chinae government before 1820. Macao was for some time its centre; but, owing to the misoconduct of the Portuguese; it was remov

only one. Formerly a large proportion of the British imports of tea were paid for in bullion; but since the expansion of the opium-trade, the balance has been reversed, and there is now a constant drain of treasure from China. The imperial government, viewing the precious metals as the only true riches of a state, regard this ment, viewing the precious metals as the only true riones of a state, regard this as a national grievance; and the trade is accordingly denounced, in their state papers, as one which occasions "an ozzing out of silver, whereby the fathomless gulf of the outer sea will soon be the receptacle of the easily exhaustible wealth of the central spring!" Nor, in looking to the influences which have guided the Chinese, is it to be forgotten, that their increased rigour and jealousy has been contemporaneous with the advance of the British to their south-west frontier and the regions of Central Asia. S

OPOBALSAM, called also Balm of Gilead and Judiacum de Mecca, is a liquid resin, obtained from the Americ Gileadensis, a tree found in Arabia. Abvasinia.

resin, obtained from the Amyris Gileadensis, a tree found in Arabia, Abyssinia, and Syria. It is at first turbid and white; of a pungent smell, resembling turpentine, but sweeter; and of a bitter, acrid, astringent taste: By age it becomes

thin, limpid, of a greenish hue, then of a golden yellow, and at length of the colour of honey. It is seldom obtained genuine in Europe; the Canada balsam, which is generally substituted for it, answering equally well. In Turkey it is used as a cosmetic. Carpobalsamum and Xylobalsamum are inferior qualities obtained from

the fruit and twigs of the same tree.

OPOPONAX (Arab. Jawesheer), a medicinal gum-resin, obtained from the OFOFONAA (Arao. Jawesneer), a medicinal gam-resin, obtained from the stalk or resin of a tall plant (Opoponar Chironium, Koch) found in Asia Minor. It occurs in small grains or drops, and in masses,—the latter, however, being generally mixed with foreign substances, and inferior; colour internally, pale yellow, frequently mixed with white, and externally, inclining to red or orange; taste bitter acrid; and odour disagreeable. It is now scarcely used.

ORANGES (Fr. Oranges. Ger. Pomeransen. It. Melanarincino. Por. Laranjas.

Sp. Naranjas), are the product of a shrubby tree, of eastern and tropical origin, but now extensively cultivated in the warmer parts of the temporate zone, particularly in the countries adjoining the Mediterranean, Portugal, and the Azores. It belongs to the citron genus. Two species are principally distinguished,—the

It belongs to the citron genus. Two species are principally distinguished,—the sweet and the bitter.

The Swent Orange (Oterus Ascrantism): flowers, white; fruit, roundish, seldom pointed, golden-yellow, or tawny; and pulp very aweet. There are many varieties. Those principally met with in Britain are the St Michael's, a small pale-yellow ind, with a thin rind, brought from the Asores; and the China, chiefly imported from Fortugal. The former is the most esteemed. The Bioarads, or Bitter Orange (C. Bigaradia); flowers also white, but larger and sweeter than the preceding, on which account they are in demand by the perfamer; fruit, useven, globose, deep-yellow, with a bitter and acid pulp. The Seville, a Spanish variety, is that chiefly imported into Britain, where it is consumed in the preparation of candide orange-peal, bitter thethers, and liqueurs. The orange has been well called "the universal fruit of commerce." The aromatic oil and the rind preserve it from the effects both of heat and of cold; while the acridity of the former renders it stroof against the attacks of insects. It is thus long in rotting if the rind is uninjured, and its kept from moisture, and so ventilated as not to ferment. From those qualities, joined to their abundance in the countries of production, oranges may be had fresh and cheap in every region of the world, and at almost every season. They are gathered for exportation in October, November, and Dectamps, is plain, especially Algarve and Andalusis; and the Gulf of Genoa and Naples; the amount in 1840, including lemons (not separated in the public accounts), being 119,915 packages, each not acceeding 5000 cubic inches; 167,547 packages between 5000 and 7300 clubic inches; besides about 12,000 lbs. of orange-flower water, and considerable quantities of oils and essences.

ORCHILLL, OR ARCHILL (Fr. Orseille. Ger. Orseile. It. Oricello. Sp.

ORCHILL, OR ARCHILL (Fr. Orseille. Ger. Orselje. It. Oricello. Sp. Orchilla), a whitish lichen (Lichen orcella) found in Guernsey and Portland Island, but chiefly obtained from the Canary, Cape Verde, and Madeira Islands. It grows on rocks, about 3 inches in length, roundish, and many stalks proceed from one root. The best is of a darkish colour. It is imported into Britain in the state to which it is gethered, and about 500 carts are annually entered for consumption.

one root. The best is of a darkish colour. It is imported into Britain in the state in which it is gathered; and about 500 cwts. are annually entered for consumption. This weed yields a rich purple tincture, used chiefly in dyeing silks and ribbons, but rarely employed alone, on account of the fugitive nature of the colour, and its extreme dearness. Lithus is a preparation of orchild in square cakes. SOUROIL, or ARGOL, a common name for crude Tarrar.

ORPIMENT (Ger. Operment, Rauschgelb), or yellow sulphuret of arsenic, generally occurs massive and lamellar, of a bright lemon or golden colour, sometimes running into red or brown; soft and flexible, but not elastic; insoluble in water; and inodorous. Sp. gr. 3.5. It is a natural product of China, South America, and other countries. The finest, called golden orpiment, comes from Parsia. Artificial orpiment is manufactured chiefly in Saxony; it occurs in the form of a yellow powder. This substance is commonly employed in dyeing and calloo printing; but the finer native varieties are reserved for artists. It is often adulterated with king's yellow, an ill-made poisonous compound, frequently containing nothing else than white arsenic and sulphur; it is quite soluble in water. The name red orpiment is sometimes given to REALGAR.

ORRIS ROOT, or FLORENTINE ORRIS, is obtained from the Iris Florentina, a native of the south of Europe. It is tuberous, oblong, about an inch thick, white;

ORRIS ROOT, or FLORENTINE ORRIS, is obtained from the Iris Florentina, a native of the south of Europe. It is tuberous, oblong, about an inch thick, white; odour like that of the violet; taste when dry bitter. The roots are imported from Leghorn; and, after being ground into powder, are used by perfumers, and in medicine. ORSEDEW (Ger. Flittergold), an article resembling gold leaf, made of copper and zinc, chiefly at Manheim, in Germany, whence it is called Manheim Gold. It is largely imported into this country, made up in books, and enclosed in casks and cases. A part is entered for home consumption, chiefly in tinselling dolls and toys, but the greater portion is reshipped to the East Indies, where it is in demand by the natives for decking their gods, priests, and dancers.

OSTEOCOLLA, an inferior kind of glue, manufactured from bones.
OSTRICH FEATHERS, a valuable article of ornamental dress. The ostrich is found only in Africa, and the best plumes are imported from Barbary. The finest are the brilliant white feathers from the wings of the male, which, in a bird

finest are the brilliant white feathers from the wings of the male, which, in a bird in full plumage, contain forty. SOUNCE (Uscia, a twelfth part), is a common division of the pound weight.

OXALIC ACID (Ger. Sauerkleesaüre), a vegetable acid found in considerable quantity in sorrel and rhubarb. It is most readily procured by the action of nitric acid on sugar, and hence has been termed acid of sugar. It occurs cystallized, in four-sided prisms, transparent, and so intensely sour, that if I grain be dissolved in 3600 grains of water, it will be perceptible to the taste; while in 200,000 times its weight of water it may be detected by means of a simple chemical test. This acid is highly poisonous, and accidents have frequently occurred from its being administered instead of Epsom salts, which it resembles in appearance. It is used in calico-printing, and by straw-hatmakers; also for cleaning boot tops, and for removing iron stains and ink spots from cloth. United with bases, it forms salts, called oxalates, which are applied to various purposes. It is an object of considerable manufacture, especially in Switzerland, where it is prepared from the juice of wood sorrel.

of wood sorrel. OYSTER (Fr. Huitre), a testaceous fish (Ostrea edulis) common on the coasts of OTSIER (Fr. Musre), a testaceous nan (Ostrea eauts) common on the coasts of Britain and most other countries. Several kinds are highly prized by epicures. In London, the Colchester and Milton oysters are held in most esteem. Edinburgh has her "whiskered Pandores," and latterly Aberdour oysters; and Dublin the Carlingford and Powldoodies of Burran. For the convenience of obtaining a ready supply, the oysters are often transported from their original beds, and laid down on other places of the coast; but these exiles are seldom found in such perfection as natives. In France, the oysters of Cancalle in Brittany, and of Dieppe, are most esteemed: the latter are of a greenish colour, communicated artificially.

The British trade in oysters ranks in importance with that in herrings and

The British trade in oysters ranks in importance with that in herrings and salmon, and affords employment to a numerous body of men, who necessarily become hardy seamen. In Jersey alone, 250 boats are employed, and 200,000 bushels annually exported. Immense quantities are carried to Billingsgate, where the season opens with great bustle on the 4th of August, at noon, and terminates on the 12th of May. 8

the 12th of May. 8

The private right in cyster-beds is protected in England by the act 7 & 8 Geo. IV. c. 29, § 36; and in Beotiand by 3 & 4 Vict. c. 74.

A convention between Britain and France, August 2, 1839, provides, that the subjects of each power shall enjoy the exclusive right of fishery within the distance of 3 geographical miles from low-water mark along the whole of their respective coasts; it being understood, however (Art. 9), that upon that part of the coast of France which lies between Cape Carterst and Point Meings, French subjects shall enjoy the exclusive right of all kinds of fishery within the limits assigned in Art. 1 (according to a chart), for the French cyster-fishery. With respect to bays, the mouths of which exceed 10 miles in width, the limiting 3 miles is to be measured from a straight line drawn from headland to headland. The cyster-fishery beyond the above limits is to be common to the subjects of both countries.

subjects of both countries.

Ρ.

PADDEE, or PADDY, a term applied to rice in the husk.
PAGODA, the name of numerous gold coins in India. They mostly weigh about 52.85 troy grains, and contain 44.39 troy grains of pure metal, the standard of the Star pagoda, the former integer of account at Madras, and worth 7s. 10d.
PAINTERS' COLOURS. [COLOUR TRADE.]
PAKFONG, a celebrated Chinese alloy, composed of copper, nickel, and zinc.
PALLADIUM, a rare metal obtained by Dr Wollaston from platinum ore.
It is hard, of a dull white colour, malleable, and ductile; sp. gr. 11.3. Its properties are not yet fully known.

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perties are not yet fully known.

PALM-OIL, a fatty substance, obtained chiefly from the drupes of the Elais Guineansis, a species of palm common on the western shore of Africa. It has the consistence of honey or butter, a golden yellow colour, the smell of violets, and a sweetish taste. When spoiled it loses its yellow colour and pleasant smell; but when well preserved it keeps several years without becoming rancid. Sp. gr. 968. It is sometimes counterfeited with hog's lard, coloured with turmeric, and scented with Florentine iris root. Palm-oil is much used by the negroes for anointing the skin and in cooking. It is produced in abundance in the countries adjoining the Guinea coast, particularly near Eboe and Brass in the Delta of the Nizer, where, according to Mr Laird, it can be bought for £4 or £5 atun. It

is collected in gourds, from which it is emptied into trade-puncheons. The quantity imported into Britain, though only 164,700 cwts. in 1831, amounted in 1841 to 394,342 cwts., of which 303,849 cwts. were entered for home consumption, chiefly for the manufacture of toilet soap, pomade, and perfumery. It is also used in medicine and surgery. [Nigrita. Oil.]

for the manufacture of toilet soap, pomade, and perfumery. It is also used in medicine and surgery. [Nigrita. Oil.] 8

PAOLO, or PAUL, a small Italian silver coin, value 5d. sterling.
PAPAL STATES. [ROMAN STATES.]

PAPER (Du. Fr. & Ger. Papier. It. Carta. Sp. & Por. Papel. Rus. Bumaga). Writing materials were anciently formed of palm-leaves, inner bark, akins, waxed tablets, and particularly of Egyptian papyrus,—several of the leaves or other substances being generally sewed together and wound on a centre stick. But these materials are now almost entirely supergaded by paper made of vegetable or other substances being generally sewed together and wound on a centre stick. But these materials are now almost entirely superseded by paper made of vegetable fibre, reduced in water to a pulp. This art is said to have originated in China about A. D. 95; and to have been known in the seventh century to the Arabians, by whom it was carried in the ninth or tenth century to Spain; from whence, or, as some contend, by way of Greece, it was gradually diffused throughout Europe. It was introduced into England in the sixteenth century; but scarcely any, except wrapping-paper, was made before the Revolution, though the manufacture afterwards advanced so rapidly that by 1760 Britain was almost wholly independent of foreign supply. The vegetable substance preferred is linen, owing to the toughness and fineness of its fibre; the best kinds of linen cloth or rags [RAcs] being used for writing-naper of the first quality; for printing-naper linen and cotton rags

or toreign supply. The vegetable substance preferred is linen, owing to the toughness and fineness of its fibre; the best kinds of linen cloth or rags [RAo8] being used for writing-paper of the first quality: for printing-paper linen and cotton rags are employed; and many kinds of coarse paper are made from hempen rags, cotton waste, refuse of flax-mills, old cordage, and tarred ropes. Paper was entirely handmade until about 1803; but, except some writing-paper, all kinds are now manufactured by a machine, then introduced by Messrs Fourdrinier and Donkin,—a contrivance which, with the improvements since communicated to it by others—principally Mr Dickinson—is justly regarded as one of the most ingenious and beautiful in the whole range of mechanical invention.

Manufacruzz.—The rags are first-separated from threads and buttons, cut, assorted, boiled with an alkali, and afterwards washed; then, immersed in water, they are reduced by a cylindrical engine into pulp or staff, and afterwards bleached by chlorine; next, the pulp is further funised, and conducted to a vat wherein the fibrous matter is kept in suspension by agitation; and in this state, after being strained to exclude knots, it is received upon an endless web of wire-gause, having a lateral as well as a progressive movement, so regulated as to spread the pulp equally, determine its thickness, and facilitate the draining of the water. The pulp, becoming solid as it advances, its them projected through felt rollers, by which it is compressed and still further separated from moisture; next, passing over heated rollers, it is dried; and, lastly, the filaments being now felted into a strongly coherent paste, it is wound upon a reel as paper,—a process completed in less than two minutes after it is drawn from the vat: the paper is then cut by a machine into sheets and calendered. This terminates the operations for printing and wrapping papers, which are only "engine-steed," by the addition of rosin and soda to the pulp-arts; but writing paper, before being w

solution of glue; after which it is pressed and dried, and then cut and calendered as before: writing paper is thus sized or varnished more highly than other kinds, in order that the ink may not spread by capillary attraction.

Hand-made paper is formed from pulp bruised with a much blunter engine than that necessary for the machine; and each sheet is made separately in a wooden frame, with a wire-cloth bottom, into which the pulp is lifted, and the water shaken out; the sheets are then piled between alips of felt, and the superfluous water pressed out; next, they are separated from the felt and subjected to the vat-press; and then dried, sized in a tub, again pressed, and finished. By this careful preparation of each sheet, and especially by the fibre being preserved more entire in the bruising, an advantage is given to the hand-made over the machine paper in firmness and quality. The latter, however, being produced in webs of any desired breadth, is alone adapted for paper-inangings and large newspaper sheets; it besides has the advantage of cheapness; while, owing to successive improvements, the difference of quality, yearly diminishing, is now scarcely perceptible.

Paper, both hand made and machine, after being manufactured, is examined to remore specks and lay saide damaged sheets; it is then counted into quires of 34 sheets, and folded; and, lastly, packed in reams of 30 quires, pressed, and tied up in a wrapper for sale.

QUALITIES AND SIZES.—Writing and drawing papers, besides the differences already noticed, are principally distinguished as laid (all hand-made) and sover; the former exhibiting the lined watermarks, derived from the wire-work of the mould being constructed of a very fine copper wire, woven into a sort of cloth. A difference of colour is observable in writing paper; the yellow is nearly the colour of the rags, but the blue tint is imparted by the mixture of smalts with the pulp. The general terms by which the qualities (independently of the sizes) of writing paper rate, shown, are laid,

Paper-making is carried on extensively in the United Kingdom, chiefly in ment (the chalky streams of which are said to be favourable to the manufacture), the country around London, Lancashire, Yorkshire, and Durham; in the vicinities of Edinburgh and Glasgow; and in the "Collection" of Naas in Kildare; and the number of mills, in 1839, was 512; whereof 411 were in England, 47 in Scotland, number of mills, in 1839, was 512; whereof 411 were in England, 47 in Sootland, and 54 in Ireland; each paying an annual license costing £4. An excise on paper was first levied in Britain in 1711 (10 Anne, c. 19); which, after many fluctuations, was fixed, in 1803 (43 Geo. III. c. 69), at 3d. per lb. on first class paper, and 1½d. per lb. on second class, "made of old ropes or cordage only." In Ireland, the duties, first levied in 1798 (by a license upon the engine, according to the contents of the vat), were assimilated to the preceding in 1824. The high duty on the first class, and the inconveniences, evasions, and frauds, attending the other regulations, were long the subject of complaint. At length, on the recommendation of the Fourteenth Report of the Commissioners of Excise Inquiry, the duty was, by 6 & 7 Wm. IV. c. 52, imposed at a uniform rate of 1½d. per lb. on all classes, after 10th October 1836. This change has led to a considerable increase of trade, and has been otherwise highly beneficial. In 1835, the quantity charged with duty was, in England, 64,899,901 lbs.; in Scotland, 12,015,059 lbs.; and in Ireland, 2,702,352 lbs.; total, 79,617,312 lbs.: the net produce of duty being £796,305. But, in 1841, the quantity charged was, in England, 76.292,724 lbs.; in Scotland, 16,821,354 lbs.; and in Ireland, 3,991,472 lbs.; total, 97,105,550 lbs.; yielding, of net duty, £587,380; the quantity having thus increased 22 per cent., while the revenue has only fallen off 26 per cent.

The paper consumed in the United Kingdom is entirely of home manufacture, except small quantities of engraving or drawing paper, and of paper-hangings

except small quantities of engraving or drawing paper, and of paper-hangings imported from France. But notwithstanding the unrivalled quality of British imported from France. But notwithstanding the unrivalled quality of British paper, and our possession of many advantages as to capital and improved machinery, the exportations, which, including stationery of all kinds, amounted in 1840 to £282,403, are nearly confined to our own colonies and foreign dependencies. Except some printing paper to America, very little is sent elsewhere,—a circumstance mainly attributable to the fact, that the manufacture, requiring no great capital, is pursued in most foreign countries, who again generally impose heavy duties upon the introduction of all papers which compete with their own. Besides, the foreign article, though mostly of low quality, is made at a cheap rate, particularly in Germany, from whence large quantities are shipped to South America and other places. In India, Chinese paper is extensively imported for common purposes. In India, Chinese paper is extensively imported for common purposes. 3

CHIEF PROVISIONS OF THE PAPER DUTY CONSOLIDATION ACT, 2 & 3 VICT. c. 23 (July 19, 1839).

CHIEF Provisions of the Paper Dury Consolidation Act, 2 & 3 Vict. c. 23 (July 19, 1839).

Duty of 14d, per lb. avoird. imposed on all kinds of paper and pasteboard made in U. K.; which, however, is to be drawn back, 1st, On all glazed or press papers bona fide used in pressing woollen cloths and stuffs; 2d, On paper used in printing bibles, pealm and prayer books, or books in Latia, Greek, or Oriental languages within the interesting is 3d, On all paper, pasteboard, printed books in complete ests (except bibles, &c., is above), or account-books, exported as merchandise; and, 4th, On stained, printed, or painted books in complete ests (except bibles, &c., is above), or account-books, exported as merchandise; and, 4th, On stained, printed, or painted books in complete ests (except bibles, &c., is above), or account-books, exported as merchandise; and, 4th, On stained, printed, or painted books in complete ests (except bibles, &c., is above), or account-books, exported as merchandise; and, 4th, On stained, printed, or painted because of the packing-indicer, the net weight of the packing-officer, the net weight of the packing-indicer,
computed at 2d. per 12 square yards (§ 1).

Duties and drawbacks to be under excise (§ 2).

Paper-making premises to be entered at excise, and inspected by officers (§ 3-7).

Every person intending to export, to give 12 hours notice thereof to excise, specifying time and place, when and where, and the person on whose account the paper, board, or books, is or are intended to be packed: and officer shall weigh and take account of same (§ 52).

Such package and £200 to be forfeited if any heavy substance or other matter be introduced therein, except paper, board, or books, or materials necessary in packing; or any device used to hinder or deceive the officer from, or in taking to hinder or deceive the officer from, or in taking a true account of the package (§ 53). [By excise order, October 31, 1839, no "objection made to introduction of other articles of stationery, or of books not entitled to drawback : provided, in the former case, the quantity shall not exceed in weight; it that of the paper, and in the latter case, \(\frac{1}{1} \) that of the books entitled to drawback in the latter case, \(\frac{1}{1} \) that of the books entitled to drawback in the latter case, \(\frac{1}{1} \) that of the books entitled to drawback in the latter case, \(\frac{1}{1} \) that of the books entitled to drawback in the latter case, \(\frac{1}{1} \) that of the books entitled to drawback in the latter case, \(\frac{1}{1} \) that of the books entitled to drawback in the latter case, \(\frac{1}{1} \) that of the paper, and in the latter case, \(\frac{1}{1} \) that of the books entitled to drawback in the latter case, \(\frac{1}{1} \) that of the books entitled to drawback in the latter case, \(\frac{1}{1} \) that of the paper, and in the latter case, \(\frac{1}{1} \) that of the paper, and in the latter case, \(\frac{1}{1} \) that of the paper, and in the latter case, \(\frac{1}{1} \) that of the paper, and in the latter case, \(\frac{1}{1} \) that of the paper is a case, \(\frac{1}{1} \) that of the paper is a case

PAPER-HANGINGS, paper stained or printed with some design, in order to be pasted on the walls of a room. They are usually made in pieces 12 yards in length, and about 21 inches in breadth. There are many varieties. Besides common and striped papers, some have a glossy or "satin" ground; others, called "flock papers," have a portion of the pattern somewhat resembling woollen cloth. Ornaments are frequently applied with bronze or imitation gold-powder; expensive kinds, leaf-gold or silver is occasionally used. The papers are commonly printed with size-colours, but some, to bear washing or cleaning, are stained with such as are mixed with oil or varnish. The reduction of the paper-duty, mentioned above, and the abolition of the additional duty on hangings of 13d. per square yard, have led of late years to a great reduction in their price, and extension in their consumption. They can now be procured so low as 10d. per piece. The patterns have also been greatly improved; though some of the more tasteful designs are still imported from France. S

PAPIER-MACHE MANUFACTURES are properly composed of paper-puln

still imported from France. S

PAPIER-MACHE MANUFACTURES are properly composed of paper-pulp boiled in a solution of gum or size to give it tenacity, and then pressed into moulds; though the term is likewise applied to trays, snuff-boxes, and other things made by glueing different plies of paper together, and then varnishing. A great variety of articles are now made at Birmingham of papier-maché; which, from its lightness and cheapness, has also been of late extensively used in the decorative work of picture and mirror frames, and walls and ceilings, especially those of steam-boat cabins and public buildings.

PARAGUAY, an inland S. American state, bounded N. and E. by Brazil, and S. and W. by the Argentine Republic. Area, 90,000 sq. miles; pop. 550,000. The capital is Assumption, in lat. 25° 16' S., and long. 57° 37' W.; pop. 12,000. This state formed, until 1808, one of the provinces of the Spanish viceroyalty of Buenos Ayres: the troubles which broke out at that period were artfully turned to account by Dr Francia, a native lawyer, who in 1814 became dictator of the new state.

Paraguay is generally level, and abounds with numerous tributaries of the Plata, which, in the

by Dr Francia, a native lawyer, who in 1814 became dictator of the new state. Paraguay is generally level, and abounds with numerous tributaries of the Plata, which, in the rainy season, overflow their banks and inundate the adjacent country. It is highly fertile. The most remarkable production is MATE YERRA, OF PARAGUAY TRA, which is sent to Buench Ayres, and consumed in enormous quantities throughout the whole of the states of the Plata, Chili, and Peru. The other productions are chiefly hides, tobacco, sugar, wood, drugs, houey, and wax. Shipe may ascend the Plata as far as Assumption, although 1000 miles from its month; but the late dictator Francia so successfully discouraged foreign intercourse, that commerce is now almost annihilated. Prior to his tyrannical selministration, the annual exports are stated to have been, Yerba, 360,000 grobs, value \$1.086,000; tobacco, \$350,000; wood, \$320,000; sogar, spirits, sweetmeats, tanned hides, cigars, cottos, cloth, &c., \$150,000; total, \$1,815,000, or £355,000. The public revenue of Paraguay under the old regime was £75,000. Messrs Achorison estimated Francia's annual expenditure (including the maintenance of 4000 troops), at £117,000. (Francia's Reign of Terror, p. 216-221.)

PARCHMENT, the prepared skin of the sheep or goat, was anciently much used as a substitute for paper, and is still, along with Vellum, employed for charters and other writings, for which great durability is desirable.

PAREIRA-BRAVA, a medicinal root procured from the Cissampelos Pareira, a native of the West Indies and South America.

PARIS PLASTER, a paste made from gypsum or selenite, so called from being prepared in large quantities from extensive strata at Montmartre, near Paris. It is employed for taking impressions from moulds, and for making statues. Mixed

is employed for taking impressions from moulds, and for making statues. Mixed with lime, it is called stucco, and is formed into cornices and ornaments for ceilings. PARMA, DUCHY OF, an inland state in N. Italy, lying between the Apennines and the Po, by which river it is separated on the N. from Lombardy. Area, 2280 sq. miles. Population, 476,000. Government, an unlimited monarchy, without a charter or any representative assemblies.

About one-third of the duchy consists of a barren mountain region, the inhabitants of which derive their chief subsistence from the forests of chestnut trees with which it is clothed: the remainder, embracing the low hills and plains stretching from the Apennines to the Po, is fertile, well cultivated, and populous; the lands having a regular system of artificial irrigation as in Pietemont. The pasture grounds are very rich, and support numbers of horned cattle, many of which are exported. Besides these, the exports embrace corn, silk, iron, a little wine, marble, timber, and sulphur matches.

and sulphur matches. The slik braccio = 23:40 Imp. inches; and the cloth braccio = 25:35 Imp. miles. The bioles, land-measure, of 6 tari = $\frac{1}{2}$ Imp. acre nearly. The stajo, grain measure, of 16 quarterole = 1:413 Imp. bushel. The rubbio of 25 lbs. = 18:18 lbs. avoirclupois. Accounts are stated in lire of 30 soldi. The Parma lira = $\frac{1}{2}$ d. nearly. In 1833, the national revenue amounted to £275,834; and the debt to £428,000.

PARSNIP (Pattinaca Sativa), a biennial British plant, common in calcareous soils, and used chiefly as a vegetable. It is next in value to white-beet, as a saccharine root, containing 9 per cent. of sugar. An ardent spirit of excellent quality

is obtained from it; and parsnip-wine (Vide Mr Roberts' British Wine-Maker), is said to possess a finer flavour than that obtained from any other British produce. PARTNERSHIP is a contract by which two or more persons agree to bring PARTNERSHIP is a contract by which two or more persons agree to bring together certain articles of property, or valuable acts of service, uniting the commercial proceeds in a common fund, divisible according to some particular rate among the partners. One may bring money, another may bring his industry, a third may bring professional talent, and a fourth, perhaps, his mere name and influence in society, as their respective contributions to the common stock; the pecuniary results of which may be distributed among these partners in proportions of corresponding variety. The position of a partner being, as between the parties themselves, beneficiary, will require something more to prove it than the mere consent of the individual. As respects third parties, however, the partner's condition being onerous, there are acts of his own which will be sufficient to place him in that position; hence arises the natural division of the law of partners to the public.

of partners to the public.

Obligations between the Partners.—All persons free to contract may enter into partnership with each other for any lawful purpose; and it may be formed either by a regular contract, or by the mere act of mutual trading. In the former case, the contract rules all transactions. A majority cannot alter it, or go beyond its the contract rules all transactions. A majority cannot alter it, or go beyond its limits, against the will of the minority, unless it be part of the agreement that a majority may bind the whole. There is a choice of persons in a partnership, and so a majority cannot force a new partner on the minority. The executors of a deceased partner are not allowed to occupy his place, unless there be a stipulation to that effect in the contract. The nature of the partnership, however, may be such, that, instead of there being a choice of persons, any one who performs certain conditions is entitled to be a member, as in the formation of a joint-stock company, where serip is publicly sold. The respective amounts of profit and loss accruing to the partners will generally be provided for by the deed of partnership. Where there is no deed, or no provision on the subject, equality is presumed. The partnership is considered in law a distinct person from the individuals forming it. The property which each individual brings into the concern, becomes the property of the company, and ceases to be that of the individual. When there is capital embarked in the concern by one party, and not by others, it will almost always be the case that the prospective right of property in the stock, as distinct from the profits, will be fixed by agreement; and perty in the stock, as distinct from the profits, will be fixed by agreement; and the cases where this has not taken place are so few that the law is not very dis-

the cases where this has not taken place are so few that the law is not very distinct on the point. In one class of partnerships only—adventures, does there appear to be a general rule, which is, that, "if a person agree to be interested in the profit and loss of an adventure, this agreement alone will not constitute him a partner in the goods which are the subject-matter of the adventure." (Collyger, 107.)

An individual partner may buy or borrow from the firm, and the firm may do so from him. The partners are individually bound to the company as its accredited agents, in which capacity they are not allowed to entertain a separate interest from it, by secretly carrying on the business for which the partnership was established, or by using the knowledge acquired in its affairs to the purpose of competing with the partnership in purchases, &c. Any advantages that may happen to be so acquired by individual partners are generally adjudged to be held by them in trust for the company. The partnership has a claim upon the time by them in trust for the company. The partnership has a claim upon the time and attention of each partner, either in terms of the agreement, or in accordance with the circumstances, where there is no special provision. The position in which the person was placed before the partnership commenced, will affect such a question of the partnership commenced. tion; thus, professional manufacturers entering into partnership with an attorney in good practice, whom they know to be fully occupied with his profession, would undoubtedly not be entitled to insist on his bestowing the same attention on the manufacturing business as themselves. A partner entitled to share in the profits, is not, without express stipulation, entitled to special remuneration for any amount

is not, without express stipulation, entitled to special remuneration for any amount of attention which he may bestow on the business of the establishment.

If the partners differ with each other on points such as those just discussed, the courts will not, in any ordinary case, interfere to settle the accounts between them without a dissolution. Where there are articles of partnership, there is a remedy in the courts of common law in England, and the Court of Session in Scotland, for breach of performance of the stipulations. Where there are no articles, the remedy, by account between the partners, can, in England, only be had in the

courts of equity. Where an account has been taken and a balance struck, a partner may sue at law for what appears due to him on that balance; and he may so sue for cash advanced by him to his partner before the partnership.

Obligations to the Public.—We now come to consider the manner in which per-

Obligations to the Public.—We now come to consider the manner in which persons become liable to the public as partners. A man becomes a partner by allowing the world in general to presume that he is one: as, by having his name on the sign of a shop, or on the bills of parcels, invoices, or accounts, or by putting his name to the negotiable instruments drawn on the firm. Where there are such manifestations of partnership, the party continues to be liable, though notice of dissolution should be given in the Gazette; and it is even said, that he will be liable though the person claiming against him was ignorant at the time when he contracted of the circumstances so inferring liability, and was not induced to contract with the firm by the belief that such a person was liable as a partner for its engagements. Where A took a promissory note from a firm, B stating that he had retired from the firm, but that it had been stipulated that his name should remain in it for some days, within which days the note was drawn, B was held liable (Brown v. Leonard, 2 Chitty, 120). A person will not continue liable, however, for the remissness of his partners in neglecting to disconnect his name with the company, if he has not given his consent to its remaining, and if he has taken all proper steps to give notice to all concerned. This is generally accomplished by advertisement in the Gazette, and by special notice to the parties with whom the firm has dealings. But there may be circumstantial notice, which a party will have to disregard at his own peril; as where there is a change in the wording of the checks, bills, invoices, &c. The advertisement in the Gazette is sufficient notice to all who have not had dealings with the concern.

Persons intending to agree for a share of the profits as the remuneration of labour, generally involve themselves in the liability of a partner. "If a person agree to pay another, for his labour in a concern, a given sum, in proportion to a given quantum of the profits, it has been considered to be settled that this does not constitute a partnership as to third persons; but that it does constitute a partnership if he have a specific interest in the profits themselves, as profits" (Montague, 10). An agreement that a broker shall have for his profit whatever he can obtain upon the sales above a certain sum, does not constitute partnership; but one coal-dealer having agreed with another to bring customers to the concern, receiving in return an annuity and 2s. for every chaldron sold, was held a partner, she having allowed her name to be used (Young v. Mrs Axtell, cited 2 Hy. Blackst. 242). If the company be accommodated with money, the interest or return for which rises and falls with the profit, it will undoubtedly make the lender a partner. In short, it may be safely taken as a rule, that where any one has an interest in a concern, the extent of which is solely measured by the result of the transactions of that concern, he is liable to the world as a partner. When the circumstances on their original merits are sufficient to found such responsibility, it will not affect the matter that the individuals have otherwise arranged with each other, or even that third parties were ignorant of the responsibility of an implied partner, and dealt without regard to his credit.

the responsibility of an implied partner, and dealt without regard to his credit.

Each partner is liable, to the full extent of all he possesses, for the general obligations of the company, and each is its accredited representative, entitled, like an agent, to bind it to all suitable obligations. In England, a partner can only engage the company in simple contracts; he cannot bind it by deed, unless he be expressly empowered by deed to do so. In Scotland, the distinction between simple contract and deed does not exist; but in practice, from the simply administratorial nature of the acts which may be transacted by individuals, the law is very nearly identical with that of England. "Although," says Professor Bell, "a partner be thus empowered by implied mandate to bind the company and his copartners in acts of ordinary administration, and in the usual course of trade, he holds no such power to bind in extraordinary acts out of the usual course. Thus, a reference to arbitration will not bind the company, if signed or agreed to by one of the partners, unless expressly agreed to or homologated by the rest, or by the company" (Com. ii. 618). The engagements which a single partner can bind the company to, must be acts of administration naturally connected with the business of the partnership. A reference to arbitration and a guarantee are out of the ordinary course of business, and would require special authority; but a partner may pledge the goods belonging to the company. The transaction does not require to be strictly confined to the line of trade, as defined in the articles of partnership. The powers of individuals may there, it is true, be limited; but the public, not aware of the limitation, are not bound by it, and, when they see a partner ready to transact in the name of the

firm such operations as it is natural that he would have to transact in the course of the business for which the company exists, they are entitled to place faith in him. Negotiable instruments are presumed to be in the way of business of every description of commercial partnership, and so each partner is entitled to draw, accept, and indores bills and notes for the company. If a bill be drawn on the partnership, by its usual collective name, and be simply accepted by one member signing his own name, he will bind the whole. But it is essential to this species of obligation, as to others, that it have the appearance of being contracted for the behoof of the firm, and in the course of its legitimate business. In partnerships purely commercial, the presumption will always be in its favour; but it is otherwise in farming and mining speculations; the presumption here is against the negotiable instrument being in the usual course of the business of the firm, but it may still be proved to be so. In a partnership where no capital is required, it is clear that one partner cannot bind the others in negotiable instruments.

A partner being in the eye of the law the agent of the company, many analogies

A partner being in the eye of the law the agent of the company, many analogies may be drawn to illustrate his powers, from the authority of agents to bind their principals in the course of ordinary transactions; and it may be inferred, that may be drawn to interact his powers, from the sutnorty of agents to bind their principals in the course of ordinary transactions; and it may be inferred, that where the partner exceeds his proper power, the firm, or another partner, as the case may be, may adopt the act as a principal does that of his agent. [Partner AL AND AGENT.] The obligation having been incurred by the partner in the name of the firm, and being within his express or implied authority, his subsequent fraudulent application of the consideration to his own use will not affect the responsibility. Thus, where a partner bought for the company, who were harness-makers, a number of bits for bridles, and immediately pawned them for his own use, the other partners in vain endeavoured to defend themselves on the plea that the articles had never gone into the company's stock, and that the transaction was a simple fraud by one of the partners (Bond v. Gibson and Jephson, 1 Camp. 185). If the person dealing with the partner, however, be accessory to the fraud, or if he know or suspect that a fraud is to be committed, or if he be placed in a situation in which a man of ordinary discernment ought to know or suspect that the partner is exceeding the limits of his authority, the other partners will not be liable. Where an individual partner, fraud or such negligence as will free the other partners is always presumed, subject of course to proof on the part of the creditor that he had every reason to believe that the partner acted within his authority. Where a debt incurred for the partner himself, but in the name of the firm, is liquidated by such a security, the presumption is against the other partners. Negotiable instructors such a security, the presumption is against the other partners. Negotiable instruments bearing the partnership name, though obtained by collusion with an individual partner, are good against the others in the hands of onerous and bona fide holders. [BILL OF EXCHANGE.]

As a counterpart to the power of the individual members to bind the company, As a counterpart to the power of the individual members to bind the company, those who contract with such individuals will in similar circumstances be bound to the company. Thus, where a member sells partnership goods, though in his own name, the company may sue for the price. They cannot, however, make the third party suffer for the fraud of the partner; and so, if the purchaser was creditor of the partner at the time of the purchase, he is allowed to set off the two sums against each other; for the chance of set-off may have been the inducement to the bargain. It is a general doctrine that the rights of the firm against third parties may be released by any one of its members, and payment to one is in all cases payment to the whole, unless there be fraud committed and connived at by the payer.

Dissolution—A limit to the partnership may be fixed in the articles, and if not

Dissolution.—A limit to the partnership may be fixed in the articles, and if not definitively fixed, may be deduced from circumstances. A partnership is not, however, dissolved by the mere expiry of its period of continuance, it is merely then terminable; and if the parties continue to transact business as usual, an indefinite partnership is entered on. A partnership may be dissolved before the arrival of the period to which its duration is fixed, on just cause, such as, that the object of the as which its duration is fixed, on just cause, such as, that the object of the association is impracticable, or that the farther pursuit of it would be attended with inevitable loss, or that one of the partners has become insane. Such remedy will be given on the application of a portion of the partners, by the courts of equity in England or the Court of Session in Scotland. When all the partners agree, the company may of course be at any time dissolved, notwithstanding any previous stipulation to the contrary. A partnership at will, or without any specified limit, may be dissolved at the pleasure of any one partner. But a partner is not entitled suddenly to dissolve the connexion for the purpose of taking his colleagues by surprise, and immediately pursuing the partnership business for his own advantage. Where a

partner attempts such a project, he will have to communicate the advantage to his colleagues, as where one partner obtained a renewal of the lease of the company's premises, without warning the others of his intention to apply for it (Featherstonpremises, without warning the orders of the death of a partner operates as a dissolution, unless it be stipulated that his representatives are to succeed to him, in which case the obligation is a right in which they represent their predecessor. In Engtion, unless it be stipulated that his representatives are to succeed to him, in which case the obligation is a right in which they represent their predecessor. In England, an adjudication in bankruptcy against a partner, and the marriage of a female partner, dissolve partnership. In Scotland, it is held that, "1st, The marriage of a female partner of a company seems a change so important that it should form a ground for dissolving the partnership. 2d, Incapacity may be by bankruptcy or disease. Insolvency of a partner does not alone dissolve a partnership. It does not operate as a transfer, nor tie up the hands of the partner. Neither has bankruptcy under the Act 1696, c. b, any effect of this sort; and it may be doubted whether it would dissolve a partnership. But bankruptcy by sequestration, which transfers to the creditors all the partners' rights, will unquestionably have this effect. So it would appear would a trust-deed for the benefit of creditors." (Bell's Com. ii. 634.)

ii. 634.)

Bankruptcy.—There is a considerable difference between the practice of those Bankruptcy.—There is a considerable difference between the practice in Scotland, as to the distribution of the estate, where both the firm and individual partners become bankrupt. According to the former, the partnership estate and the individual estates are separated from each other, each becoming liable for its own debts in the first place. The joint estate is first applied to the payment of the debts in the first place. The joint estate is first applied to the payment of the partnership creditors, the surplus only going to the creditors of the separate estates are first applied to the respective separate debts, the surplus only going to the creditors of the joint estate. "In Scotland, the creditors of a company have set apart, as held in trust exclusively for them, the partnership estate, for payment of their debts against the company; and they have a right to be ranked as creditors, for the balance unpaid, on the private estate of the partners" (Bell's Com. ii. 660). To the English rule there are exceptions. A joint creditor, who is the petitioning creditor in a separate fiat, may prove against the separate estate, and so may a joint creditor, where there is no joint estate whatever, and no solvent partner to meet the responsibilities of the company. Where a partner becomes bankrupt, the assignee (in Scotland the trustee) takes his place as a member of the partnership, for the purpose of winding up its affairs. The creditors are entitled to the bankrupt's individual share of the property in common, subject to the state of the partnership accounts. No member of the company has any claim on its bankrupt estate until the claims of the joint creditors are satisfied.

After an act of dissolution, a partnership exists only for the purpose of winding

After an act of dissolution, a partnership exists only for the purpose of winding up its affairs, by converting the estate with all expedition into money, and dividing the proceeds among the partners. It is often agreed that the business of winding-up is to be transacted by one member of the company, but the partners still connp is to be transacted by one member of the company, but the partners still continue liable for his transactions with third parties, so far as consistent with the powers which the public may have reason to suppose that he has been intrusted with. Where it is known that the partnership is dissolved, such a person will not be entitled to pledge the credit of his copartners to a negotiable instrument. It is one of the privileges of a partner to insist, on occasion of a dissolution, that all the partnership property be brought to public sale. (Montague on Partnership. Cary on Partnership. Collyer on Partnership. Smith's Mercantile L., 18-56. Bell's Com. ii. 612-669.] [Company. Corporation. Smuggling.] S PASSENGER. [Customs. Emigration. Smuggling.] S PATENT-LETTERS are those public acts of the crown, which, being patent or open to the public at large, have the great seal appended to them. Corporations

open to the public at large, have the great seal appended to them. Corporations are thus constituted, and peerages may be thus conferred. The most important description of letters-patent, however, are those commonly known by the name of patents, in which the crown confers a monopoly in some new invention of a useful manufacture or commodity, on the inventor or those authorized by him. In Engmanuscture or commodity, on the inventor or those authorized by him. In England, by 21 Jas. I. c. 3, this authority was retained when the power of the crown to grant monopolies in other cases was abolished by act of Parliament, and the practice seems to have been tacitly adopted in Scotland. By that act, the period beyond which the crown cannot grant the privilege is fourteen years; but by a late act a patent may be renewed for seven years.

The procedure commences with a petition, narrating the utility of the invention, and praying for the usual privilege of "the sole working, constructing, making, selling, using, and exercising of the said invention." The parts of the kingdom for

which the patent is prayed must be mentioned. One patent will serve (if specially desired) for England and the colonies. The patent states a time within which the "specification," as described below, must be lodged. In practice, two months is the period when the patent is for England only, four months when it is for England and Scotland, and six months when it is for the United Kingdom (Carpmael on Patents, 62). The expense of obtaining a patent for England is estimated at £120, for Scotland at £100, and for Ireland at £125, or upwards (Report of Select Committee on Patents, 12th June 1829, p. 17)

Committee on Patents, 12th June 1829, p. 17).

In England, the petition is accompanied by a declaration before a Master in Chancery, that the petitioner has invented or imported the article. The petition and declaration are lodged at the Home Office; and in a few days the former is returned, with a reference to the Attorney or Solicitor General. It is in the option of the applicant to lay it before either of these officers. The clerk of the law-officer searches his books for a caveat that may affect the petition, and if he find one, gives notice to the party who entered it, who has a week to give notice of opposition. The law-officer hears parties and reports. This report receives the royal warrant at the Home Office, directing a bill to be prepared for the royal signature. The warrant is then taken to the Patent Office, where again it may be opposed on a caveat. If the law-officer decide in favour of the applicant, he signs the bill, which then goes to the Signet Office, where it receives a warrant called a signet bill, and passes to the Privy Seal. A Privy Seal warrant, or Privy Seal bill, authorizing the appending of the Great Seal, is granted, and coming then before the Lord Chancellor, it may be opposed for the last time. Here the letters-patent are made out and sealed with the Great Seal. 8

In SCOTLAND, the declaration is made before a Justice of the Peace, the petition

In Scotland, the declaration is made before a Justice of the Peace, the petition and declaration are referred to the Lord Advocate, a Queen's warrant is granted, and the seal appointed by the Treaty of Union as a substitute for the Great Seal is appended.

In IRELAND, the petition and declaration are referred to the Lord-Lieutenant, Queen's letter is granted on his report, and the Great Seal of Ireland is appended. (COMMENTARY ON THE LAW OF PATENTS.)

Caveat.—Any one fearing that his invention may be anticipated before he is ready to apply for a patent, may lodge a "caveat" with the law-officers of the crown. This is a request that hav-officers of the crown. This is a request that notice may be given to the person who enters it, if application be made for a patent on the subject of an invention which he describes in general terms. The caveat secures no monopoly or exclusive right against the public, its sole effect is against any other person's right to obtain a patent for the invention. If any person, therefore, makes and vends the commodity in the mean time, the caveat becomes useless, for neither the inventor nor any other person can obtain a patent. obtain a patent.

When a caveat is lodged, if any person applies

obtain a patent. When a caveat is lodged, if any person applies for a patent relating to the same subject, the lodger receives notice, and has seven days for deciding whether he shall oppose the application. If he oppose, both parties are heard by the law-officer of the crown. If the inventions are different, each may obtain a patent. If both have made the same invention, neither can obtain one. If the one has borrowed from the other, lowever, the original inventor will undoubtedly be entitled to the patent. A caveat expires in a year, but may be renewed.

Prolongation of a patent for seven years, after the expiry of the original fourteen, may be granted in terms of the act ô & 6 Wm. IV. c. 83. The applicant publishes his intention to apply for the prolongation to her majesty in council, by advertisement thrice in the London Gazette, in three London papers, and thrice in a local paper—where his manufacture is carried on, or iff he carry on none) where he resides. He then petitions the council. A caseat may be lodged against the prolongation. The judicial committee, hearing parties, and examining witnesses, report whether the prolongation should be granted or not. These proceedings must all be fol-

lowed out before the original period of fourteen

lowed out before the original period of fourteen years expires.

The Invention.—It is a requisite that the invention be complete of its kind, constituting when embodied a vendible article. The discovery of a mere principle cannot be protected,—a practical result in the form of an article of commerce must be shown. The invention must have been made by the claimant of the patent, or must have been introduced by him from a foreign must have be n introduced by him from a foreign

been made by the claimant of the patent, or must have been introduced by him from a foreign country. It must not have been used before, or employed as an article of trade or manufacture, either by the petitioner or any other person. Use in one of the divisions of the United Kingdom will not invalidate a patent for any other part, if obtained by the original inventor importer from abroad. By 5 & 6 Wm. IV. c. 83, provision is made for protecting parties from the consequences of immaterial and nominal adoptions of previous inventions.

The Title under which the patent is petitioned for is an object of importance, as it is by its applicability to the invention that the lodger of caveat knows whether the application will interfere with himself or not. It must convey an idea of what has been invented, but of nothing more. Thus, Lord Cochrane's patent for naphtha-lampe was found vold, because it was called "a method or methods of more completely lighting cities, towns, and villages;" whereas, though it was only for such a purpose that his invention could apparently be used, from the noxious nature of the materials, the invention was after all but a only for such a purpose that his invention could apparently be used, from the noxious nature of the materials, the invention was after all but a lamp suitable for the purpose of burning naphtha, and should, it was said, be called so (Cochrane v. Smethurst, 1 Stark. 205). The title must not contain more uses for the commodity than those which it is adapted to; so Felton's patent in 1837, for "a machine for an expeditious and correct mode of giving a fine edge to knives, raxors, scissors, and other cutting instruments,"

was held bad, because the machine described would not sharpen scissors. (Holroyd on Patents, 94.)
The Specification or description of the invention enrolled by the patentee requires peculiar attention. "The invention must be accurately ascertained and particularly described: it must be set forth in the most minute detail. The disclosure of the secret is considered as the price which the natantee nava for this limited monoclosure of the secret is considered as the price which the patentee pays for this limited monopoly, and therefore it ought to be full and correct, in order that the subject of his patent may at its expiration be well known, and that the public may reap from it the same advantages as have accrued to him (Godson on Patents, 106-7). On the proper characteristics of the specification, Mr Godson farther says, (p. 118), "It is a firm-damental rule, on which all others for making and judging of a specification depend, that the secret must be disclosed and the invention described in such a manner that men of common understanding, with a moderate knowledge of understanding, with a moderate knowledge of the art, may be enabled to make the subject of

"The description must be confined to the manufacture, that the novelty may be known. Extraneous matter, however learned, must not be introduced to darken it. Though it is ad-dressed to the public in general, it need not be so circumstantial, or so explanatory, that per-sons entirely ignorant of the science from which the subject is taken may thereby alone be able to learn and use the invention. Nor, on the other hand, should the description be sc concise as to become obscure." The description must be confined to the

as to become obscure.

as to become obscure."

If things are described as being used to produce the effect, which really have not been used, they are presumed to be stated for the purpose of misicading, and will have the effect of destroying the patent. Buch also is the effect of any attempt to conceal the use of known materials by an obscure method of describing them, or by a technical description of the method in which they are formed, such as to make that appear part of the invention. (Bavory v. Price, 1 R. § M.1.)

M. 1.)

Improvements.—Where an improvement merely has been invented, care must be taken not to make the terms of the specification such that a reader may be led to infer that a part of the commodity, well known before, has been invented by the patentee. Mr Godson lays down these modes of specification as the best scapted:—

"First, By describing the whole manufacture, and then particularizing, with great exactness, the addition of the inventor.

"Secondly, By a description of the whole

in possession of some article of moveable property, which he retains as a security for the payment of a debt. There are several transactions of this class which can only be legally undertaken with a licensed pawnbroker, and to these cases the statutory regulations abridged below strictly apply. There are certain principles of mercantile law which, however, apply to cases not coming within these regula-

The person who gives the pledge is called the pawner, and the person who receives it the pawnee. The contract is one of those bailments to which the rules of careful custody apply, and the pawnee is held responsible for ordinary care of the pledge deposited with him. [Bailment.] If, being of a perishable character,

Amendment.—By 5 & 6 Wm. IV.c. 83, a person who holds a patent may enter an amendment with the clerk of the patents of England, Scotwith the clerk of the patents of England, Scot-land, or Ireland, with consent of one of the law-officers of the crown. The amendment may extend to "a disclaimer of any part of either the title of the invention or the specification, stating the reason for such disclaimer;" or "a stating the reason for such disclaimer;" or "a memorandum of any alteration in the said title or specification, not being such disclaimer or such alteration as shall extend the exclusive right granted by the said letters-patent." Such amendment is considered a part of the specification. A cavest may be lodged, giving the partion. A cavest may be lodged, giving the particle. The such amendment is consent to be made before he grants his consent to the amendment. No amendment can be pleaded in any action pending at the time when it is enrolled. Extent of the Privilege.—It is a condition in every patent, that the patentee shall not, by assignment or otherwise, extend the privilege to any number of persons exceeding five. or open

any number of persons exceeding five, or open any books for public subscriptions to raise money any books for public subscriptions to raise money for carrying on the operation from persons exceeding that number, and that he shall not presume to act as a corporat body. This does not prevent the patentee from granting licenses to any number of persons to use his patent, provided the consideration they pay be a sum certain, either received in full at the time of granting, or paid periodically. It is when the consideration for the communication of the privilege is connected with the profits, and constitutes a

ing, or paid periodically. It is when the consideration for the communication of the privilege is connected with the profits, and constitutes a parinership between the patentee and the privileged person, that the above restriction comes into operation.

Except in so far as thus limited, the patentee has full command over his privilege. Whenever it is infringed he can obtain damages. Whether the patent infringed be a valid one will depend on the matters already discussed.

By 5 & 6 Wm. IV. c. 83, when a person is pursued for infringement of patent, if he intend to object to the validity of the patent, he must give notice of his objections; and he can prove no other objections but such as he gives notice of, unless with the discretionary permission of the judge on special cause shown. the judge on special cause shown

the judge on special cause shown.
The patentiec can convey his privilege in full, with his right of action, or he may communicate it by license, or convey a share in it, subject to the limitations noticed above. It is available to

the limitations noticed above. It is available to creditors on bankruptcy.
By the act of 5 & 6 Wm. IV., whoever, without license of a patentee, imitates his mark or stamp, or by the use of the word "patent," or otherwise, endeavours to make articles pass off as those of the patentee, is liable to forfeit £50 for each offence. The act permits an article, for the making of which a patent has expired, to be marked as "patent."

(Godson on Patents. Holroyd on Patents. Carpmacl on Patents. Webster on Patents. Burlon's Manual of the Law of Scotland, 530-540.) the addition of the inventor.

"Secondly, By a description of the whole manufacture, pointing out the parts that either are old or not material to the invention.

"Thirdly, By giving an accurate and intelligent description of the improvement, and the manner in which it is applied to the subject, or parts that are old.

"Fourthly, By describing the whole manufacture, if it be an improvement of another for which a patent has been obtained, taking care to refer in the new specification to that of the former patent." (156-7.)

PAWN, OR PLEDGE, is a contract by which a lender, or other creditor, is put in possession of some article of moveable property, which he retains as a security

it perish in the course of nature, he is not responsible, and may recover his money If it is of a nature to be deteriorated by use, as wearing apparel, he is not entitled to the use of it. In the case of an animal which is not deteriorated by use, and the cessation to employ which is a loss of valuable services,—as in the case of a horse or a dog,—it is an understood part of the contract that the pawnee has the use of the pledge. Where there is neither advantage nor disadvantage to the article in using it,—as in the case of jewellery,—it would appear that the pawnee may use the pledge, but that he is absolutely responsible for all damage or loss that may arise from the use. He must give up the pledge on a tender of the debt, and, unless by special contract, there is no time when the pledger cannot redeem. (Sir E. Tomlins, voce Paun. Jones on Bailments, 75-85.)

PRINCIPAL STATUTORY REGULATIONS AS TO PAWNEROKERS.

By 25 Geo. III. c. 48, and 39 & 40 Geo. III. c. 99, every pawnbroker must take out a stamp-license. Persons who take no higher stamp-license. Persons who take no higher than 5 per cent. per annum for money lent on pledge, are not to be deemed pawabrokers. Pawabrokers must, under a penalty, enter every advance (if exceeding 5s.), with a description of the pledge, the date, and the name and address of the person pawning the goods, and of the owner, in a book, and must copy the entry on the ticket; all advances above lies, must be entered in a separate book and numbered, the number being marked on the ticket.

The pawnbroker must file a duplicate on a pledge being redeemed, stating his profit. Pawnbrokers receiving in pledge unfinished manufactures or apparel, from the persons to whom they are committed to be finished, forfeit double the sum lent, and must restore the goods. On the

calendar month (a charge for one month being due at any time before its expiry, but charges for additional months not commencing until after for additional months not commencing until after the expiry of seven days, and being to the extent of only one-half the profit, until after the expiry of the first fourteen days). For 2a. 6d., one halfpenny. For 5a., one penny. For 7a. 6d., three halfpenny. For 15a., threepence. For 12a. 6d., three halfpenny. For 15a., threepence. For 17a. 6d., threepence halfpenny. For a sum of £1, fourpence; and so on progressively and in proportion for any sum not exceeding 40a. For every sum exceeding 40a. and not exceeding 42a. and not exceeding 42a. and not exceeding £2a. and not exceeding £2b. threepence to every £1, and so on in proportion for any fractional sum. Where any intermediate sum lent on a pledge exceeds 2a. 6d. and does not exceed 40a., a sum of fourpence may be charged in proportion

sure or apparel, from the persons to whom they are committed to be finished, forfeit double the are committed to be finished, forfeit double the sum lent and must restore the goods. On the declaration of the proprietor of any goods, showing just cause to presume them unlawfully pawned to restore them to the owner.

There are provisions authorizing justices to enforce restitution of pledges for loans under £10, on tender of the sum and profits. Where £10, on tender of the sum and profits. Where £10, on tender of the sum and profits. Where £10, on tender of the sum and profits. Where £10, on tender of the sum and profits. Where £10, on tender of the sum and profits. Where £10, on tender of the sum and profits. Where £10, on tender of the sum and profits. Where £10, on tender of the sum and profits. Where £10, on tender of the sum and profits. Where £10, on tender of the sum and profits. Where £10, on the sum and profits. Where £10, on the sum of the pawnbroker may be compelled to give the owner a copy of a justice, on evidence of ownership and the right to redeem the goods.

Where £10, on tender of the sum and profits. Where £10, on the sum of the pawnbroker has embezgled or injured a pledge, or sold it before the proper time, he may award damages.

A pawnbroker not producing his books and papers unmutilisted when required by a magistrate, in consequence of any criminal or other question, is liable to a penalty. Pawnbroker not to sell a pledge and other offences incident to the nature of the transaction.

Information against pawnbrokers for offences must be given within twelve calendar months. The following is the rate of profit or interest which pawnbrokers are entitled to charge per PEAR, the well-known fruit of the Pyrus commusies, is extensively cultivated in the nature of the transaction.

PEAR, the well-known fruit of the Pyrus communis, is extensively cultivated in this country, more particularly in Worcestershire, where it is made into perry. "The fruit catalogue of the Horticultural Society contains above 600 varieties of the pear; and it is there observed, that the newly introduced Flemish kinds are of much more importance than the greater part of the sorts which have been hitherto cultivated in Great Britain, and when brought into use, will give quite a new feature to the dessert." (Veg. Substances, vol. i. p. 234.) The quantity imported is small. The timber of the pear-tree is light, smooth, and compact, and adapted for carving, for nicture-frames, and tool-handles.

carring, for picture-frames, and tool-handles.

PEARL (Fr. & Ger. Perle. Arab. Looloo. Pers. Mirwareed. Cyng. Moottoo), a spherical concretion found inside of the shell of the Concha Margaritifera, a testaceous fish of the oyster kind. It consists of alternate concentric layers

of membrane and carbonate of lime. The best are of a clear bright whiteness, free from spot or stain, with the surface naturally smooth and glossy. The largest are the most valuable. Those of a round form are preferred, but the larger pear-shaped ones are estensed for ear-rings. Seed-pear/s are those of the smallest size. The most extensive pearl-fisheries at present are those in the Gulf of Mansar in Ceylon, where the finest are procured, and near Bahrein Island, in the Gulf of Persia. The net revenue derived from the Ceylon fishery for the years prior to 1834, was £145,000; in 1835 it produced £38,000. At Bahrein, the fishery, according to Lieutenant Wellsted, employs in the season about 4300 boats. Pearls are also obtained at the S. extremity of the Indian peninsula, in the Saluk islands, and in other parts of S. extremity of the Indian pennisula, in the Saluk Islands, and in other parts of the east. They were also formerly procured in various parts of the New World, but the American fisheries are now of little importance. Pearls are likewise found on the Algerine coast, and in some parts of Europe. In Britain, a coarse kind may be got in some rivers, particularly the Tay, from a large sized muscle (Unio Margaritifera). The best pearl-oysters are generally found in water about 7 fathoms deep, and are procured by divers who remain under water scraping them off rocks for 50 or 55 seconds at a time. A diver often brings up in his backet 150 coarses at a dip but at other times not more than 5. The most valuable on record

7 fathoms deep, and are procured by divers who remain under water scraping them off rocks for 50 or 55 seconds at a time. A diver often brings up in his basket 150 oysters at a dip, but at other times not more than 5. The most valuable on record are, one purchased by Tavernier at Catifa, in Arabia, the diameter of which was rather more than half an inch, the length upwards of two inches, and the price £110,000; and one obtained by Philip II. in 1587, from the island of Margarita, off the Colombian coast, which weighed 250 carats, and was estimated at 150,000 dollars. The value of pearls, however, has now fallen, chiefly owing to the great improvement which has taken place in preparing them artificially. The best imitation ones are perhaps those made by a Frenchman named Jaquin, by covering the inside of hollow glass beads with essence d'orient. Roman pearls are prepared with the purest and finest alabaster.

PEASE (Da. Ærter. Du. Eroten. Fr. Pois. Ger. Erbsen. It. Piselli. Por. Ervilhas. Sp. Guisantes), the product of a well-known leguminous plant, of which two species are commonly distinguished in this country—the gray field pea (Pisus arvense), grown extensively in some parts of England, and the only kind raised in fields in Scotland; and the white or yellow pea (P. Sativum), the species cultivated in gardens, but which is likewise extensively reared in fields in Middlesex. Kent, and other English counties. Of these two species there are many varieties. The soil best adapted for pease is a light or sandy loam of some depth, and in good heart; but they should not be repeated on the same ground in less than 10 or 12 years. Their produce is very uncertain; none of our cultivated crops presents such frequent failures. According to Professor Low, "30 bushels an acre are held to be a good crop in most districts of this country. Perhaps the average of the kingdom does not exceed 20 bushels an acre." Pease are highly nutritious, and, boiled with some animal fat, make an excellent food for hard-working men. The garden

extensively used in feeding stock. [Conn.]
PEAT, a kind of fuel, composed chiefly of the decayed fibres of mosses PECK, a British corn-measure, containing 2 Imp. gallons, or 908 Fr. litres. PECUL, a Chinese weight equal 1331 lbs., but in Java reckoned 136 lbs. PEDLAR, or HAWKER, an itinerant dealer in small-wares. In England,

a pedlar is required (under a penalty of £50), to take out an annual license from the stamp-office, costing £4 if he travel on foot or with horses alone, and £8 if he the stamp-onner, costing 2x in the travels with a horse or other beast bearing or drawing burden. Before receiving a license, the applicant must produce a certificate of character from the parish clergyman and two householders. The words "Licensed Hawker" must be placed conspicuously on his pack, cart, and handbills (50 Geo. III. c. 41, and 1 & 2 Wm. IV. c. 22, § 75). In Scotland, the regulating act is 55 Geo. III. c. 71. A hawker is prohibited, by 48 Geo. III. c. 84, § 7, from selling tea, foreign spirits, tobacco,

or snnff.

PELLITORY (Anthemis Pyrethrum), a plant cultivated in Germany in Thuringia, and near Magdeburg, for its root, which is used in medicine as a masticatory and stimulant. The root is without smell, and when dry it is some inches long, tough, fibrous, of the thickness of a quill, externally gray, internally white.

PENANG, PULO-PENANG, on PRINCE OF WALES ISLAND, a settlement of the East India Company, on the W. coast of the Malayan Peninsula. Area, 130 sq. miles. Population, 40,000, chiefly Malays and Chinese. Georgetown, the port, pop. 20,000, is situate in lat. 5° 25′ N. and long. 100° 23′ E. A resident is stationed here, subordinate to the one at Singapore.

The greater part of the island is mountainous and steril, or covered with forests. A portion of the south and of the eastern parts is level and cultivated. The seasons are irregular. The wet season is generally from September to November; coldest months, December and January; hottest, June and July. Pahrenheit ranges in Georgetown from 70 to 90, but considerably lower on the hills. The chief productions are spices, especially pepper and fruits; and the fisheries are extensive. This settlement was formed in 1786; and from its position, salubrity, and the abundance of provisions, was found useful during the war as a place of resort for our shipping: it is at present visited by vessels proceeding from India and Arabia to China. It was formerly an important emportum for the trade with the numerous petty and semi-barbarous states in the Eastern Seas; but of late it has been supplanted by Sinoarous. It is now chieff used as an entrepol for the produce of the countries in its own neighbourhood, in the Malay Peninsula and Sumatra,—the native merchants receiving in exchange Britiah and Indian goods. It is supplied with rice from Sengal, Acheen, and the Quedat territory. In the year 1835–35 the imports were valued at £411,769, and the exports at £430,675. For measures, weights, and money, see Malacca. Opposite to Penang, on the Malay Peninsula, is the British province of Wellesty, extending about 30 miles along the coast, and from 6 to 10 miles inland. Pop. in 1836, 47,555. The sugarcane is here extensively cultivated by Chinese settlers.

PENCIL MANUFACTURE. The pencils of the finest quality are made from

PENCIL MANUFACTURE. The pencils of the finest quality are made from plumbago or black-lead, procured in Borrowdale mine, about nine miles from Keswick, in Cumberland. The produce of this mine, which belongs to a company, is periodically despatched to their warehouse in Essex Street, Strand, London, contiguous to which their "lead sales" are held on the first Monday of every month. tiguous to which their "lead sales" are held on the first Monday of every month. The best pencils are cut out by a saw from sound pieces of plumbago, previously calcined in close vessels at a bright red heat. No other lead is sonsidered equal to that of Borrowdale, though its quality is not uniform, but an inferior sort, imported from Mexico and Ceylon, is used for secondary pencils; and more common ones are now largely made from a composition of plumbago powder, lamp-black, and clay. The manufacturers who enjoy the highest reputation are, Banks, Forster, & Co., and Airey, of Keswick; and Mordan & Co., and Brookman & Langdon, of Landon. London

PENNY, the most ancient British coin, was at first composed of silver, and minted with a deep cross. When broken into two parts, each was called a half-penny, and when into four, each was called a fourth-thing, or farthing. Pennies are still minted in silver, but those in general circulation have been for a long time made of copper. [Coin.]

made of copper. [Coin.]

PENS are either derived from the quills of fowls, or fabricated from steel. Quills fitted for writing may be obtained from many birds, but the best are those of the goose, the only kind used in large quantities. Of these, 5 are obtained from each wing, and 20 may be procured from each bird during the year. They are arranged by the quill-dresser into "Firsts" called Pinions, "Seconds," "Thirds" (the largest and most valuable); and the fourth and fifth quills are both known by the name of "Fourths" or "Flags." To remove their membranous skin and natural softness and toughness, so as to fit them for writing, different means are followed in different countries. In Britain they are now generally "dressed" by the process of duching, which is performed by introducing the quill for a moment into a redhot earthenware retort, and then passing it quickly between a blunt knife and heated plate, thus hardening it and freeing it from skin. They are then tied up in bundles of 25 each for market. The British and Irish are inferior to those brought from the Continent, especially from Riga and Hamburg. In 1841, the number of foreign quills entered for consumption was, 18,000,000.

Steel-pens were little used until 1830, when their rigidity was modified by Mr Perry, by introducing apertures between the shoulder and the point; other improvements have been since made by him, and by Messrs Mordan, Gillott, and others; and the quantity used in this country is now very considerable, besides which, great numbers are exported. The total quantity of steel employed in this manufacture has been estimated at 120 tons, from which upwards of 200,000,000 pens are produced. One Birmingham manufacturer employed in 1838 no fewer than 300 persons in making steel-pens. They are besides extensively manufactured in London and Sheffield. There are many kinds, but the common "three-slit pen" has long been and still is a favourite. When first introduced, steel-pens were as high as 8a.a-gross; they afterwards fell to 4s., and now PENS are either derived from the quills of fowls, or fabricated from steel. Quills

8s. a-gross; they afterwards fell to 4s., and now they are produced at Birmingham

at fourpence a-gross!

PEPPER, a name given to several aromatic berries or fruits extensively used as condiments. Four different kinds are distinguished in commerce: black pepper,

long pepper, Cayenne pepper, and Guinea pepper.

BLACK PEPPER (Du. Peper. Pr. Poivre. Ger. Schwartze Pfeffer. It. Pepe nero. Por. Pimenta. Sp. Fimienta. Hind. Gol-mirch. Pers. Tifil seeab), the most important of all spices, is the product of a slender climbing-plant or vine (Piper nigruss), extensively cultivated in Malabar, in India; Sumatra, particularly the W. coast, and other islands in the Indian Archipelago; Siam,

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and Malacca. The best is that of Malabar. The plants begin to bear in their fourth year, are prime in their seventh, and gradually decline about their tenth year. Generally, the culture is not difficult, and two crops are yielded annually; but the produce is subject to great fuctuations. The berries are produced in clusters, and are gathered before ripening. They are at first of a bright red colour, but, by drying in the sun, become black and corrugated on the surface: taste, but and flery; odour, slightly aromatic. The largest, heaviest, and least shrivelled are the best. Pepper sold ground is sometimes adulterated with the powder of the husks of mustard-seeds, or burnt crusts; and Dr Paris states, that there are artificial berries, which may be detected by their crumbling when immersed in water. "White pepper," the fruit of the same plant, gathered after tis fully ripe, and freed of its dark coat by maceration in water, is smooth on the surface, and midder than black pepper. It is little used.

Love Pepper (Fr. Poivre long. Ger. Large Pfeffer. It. Pepe large), is also the product of a climbing-plant (P. longuss), abundant in the E. Indies. The berries are small, and disposed in short, dense, terminal spikes. They are gathered unripe and dried, when they become of a dark-gray colour. Their odour is faintly aromatic; but in taste they are exceeding hot.

CAYENNE PEPPER (Fr. Poivre d'Espagne. Ger. Spanischer Pfeffer. It. Peperone commune), is a mixture of the powder of the dried pode of different species of Capticus, more especially of the C. fruiscoses [Cuilliss], the C. annuum, or Spanish pepper, and the C. beccatum, or bird pepper, natives of the East and West Indies and South America. It is brought to England in the state of powder from the West Indies. In taste it is very flery and acrimonious; its colour is reddish. It is employed in medicine, but is chiefly used as a stimulating condiment, being an essential ingredient in curry-powder.

Guinea Peppe consists of the aromatic seeds of two species of Amonum

The trade in the three last is of little importance compared with that in black pepper, which has formed one of the staples of East India commerce from a remote period. This trade has greatly benefited by the opening up of the Company's monopoly; the price in Loudon (in bond) having been reduced from upwards of 1s. per 1b. to about 4d. The consumption has also been increased considerably in this country by a reduction of the extravagant duties with which the commodity was burdened during the late war. In 1326, the duty per 1b. was lowered from 2s. 6d. to 1s.; and the consumption, which had previously been only about 1,300,000 lbs. a-year, was advanced, in 1834, to 2,457,020 lbs. A further reduction of duty to 6d. per 1b. was made in 1837; but this has not been followed by the increase anticipated, the consumption in 1841 not having exceeded 2,750,798 lbs. The imports vary greatly; the amounts in 1838, 1839, 1840, and 1841, having been respectively 3,682,342 lbs., 9,798,059 lbs., 5,927,959 lbs., and 12,928,758 lbs. Excepting small quantities brought direct from Sumatra and other Indian islands, and Western Africa, almost the whole is imported from the territories of the East India Company. The surplus over our own consumption is re-exported to all parts of Europe, the north of Africa, America, and Australia.

pany. The surplus over our own consumption is re-exported to all parts of Europe, the north of Africa, America, and Australia.

Different estimates have been formed as to the extent in which pepper is produced. The latest is probably that furnished, in 1840, by Mr De H. Larpent, chairman of the East India Association, to the Lords' Committee, on the petition of the East India Company. According to that gentleman, "pepper is produced in Sumatra and the Archipelago to the extent of 35,000,000 lbs.; and Malabar, which is our own (supposing India to be all one country), produces from 15,000,000 lbs. to 20,000,000 lbs."

(Par. Paper, 1840, No. 353, Q. 403.) [Pimento.] S

PERMIT—Excise. Each statute imposing an excise duty generally specifies a certain limit as to quantity, beyond which the commodity in question cannot be conveyed from place to place without a permit from an officer of excise. The general system of granting permits is regulated by 2 Wm. IV. c. 16. No officer can grant one until a request note be presented to him. The note must be signed by the person desiring the permit, or by his clerk or servant, and must contain the date of requesting, the places from and to which the commodity is to be removed, and the names and designations of the sender and receiver. When the party desiring the permit is not licensed to deal in the commodity, he must satisfy the commissioners of excise, or the collector or supervisor of the district, that all duties have been paid; and, where the goods are not merely transferred to other premises have been paid; and, where the goods are not merely transferred to other premises of his own, but are conveyed to another person, he must make a declaration that they have not been sold. Exciseable commodities removed without permit are forfeited, and every person concerned in the removal is liable to a penalty of £200. The permit specifies a time within which it is available, and if not used within that time, it does not protect the goods from seizure on their removal. It is open, however, to prove to the court that the delay was occasioned purely by accident. A permit not used must be returned; and when there is no return, if the officer, on taking an account, find no decrease of stock corresponding to the permit, the

difference is forfeited. There can be no action for the price of exciseable commodities delivered without a permit.

PERRY, the fermented juice or wine of the pear. In this country, it is chiefly made in Worcestershire.

made in Worcestershire.

PERSIA (Pers. Iran), a kingdom in Asia, extending from 26° to 39° N. lat., and from 44° to 62° E. long., and bounded N. by the Russian Empire, Caspian Sea, and Tartary; E. by Afghanistan and Belocchistan; S. by the Persian Gulf; and W. by the Turkish Empire. Area, 450,000 sq. miles. Population vaguely estimated at 9,000,000, composed chiefly of Mohammedans of the Shiite sect. The kingdom is divided into 13 provinces, which are subdivided into districts. Capital, Teheran; pop. The government is a military despotism, vested in a sovereign under title of shah.

title of shah.

The country exhibits great diversities of surface, climate, and productions. Its most remarkable features are its chains of rocky mountains,—its long, arid, riverless valleys,—and still more extensive sait or sandy deserts. In the N. and E. paris it is cold, mountainous, and barren; in the middle parts, sandy and desert; in the W. and E. its warm and fertile; and "dreariness, solitude, and heat" are, according to Morier, the chief characteristics of the shores of the Persian Guilf. The greater portion is devoted to pasturage, on which are reared horses, sheep, and goats. The horses, stronger and more serviceable than the Arabian, are highly esteemed. The sheep are of the long-tailed species, producing however very fine wool; while that of the goats of Kerman possesses many of the qualities so much esteemed in the Cashmere variety. The fruits are of peculiar excellence; and the wine of Shirax is celebrated throughout the east. The mulberry also grows in such abundance, especially in the north, as to render slik the great staple of the king-dom. The grains cultivated are chiefly those of Europe. The other vegetable productions are cotton, tobacco, sugar, drugs, and dye-stuffs. The chief mineral products are copper, iron, salt, bitumen, and naphtha.

In former times Persia was distinguished for the manufacture of all the fabrics suited to the estentatious tasts of oriental countries; and these manufactures are, though to a limited extent, still in existence. The other articles made consist chiefly of arms, earthenware, leather, paper, and pewellery.

and jewellery.

ostentatious taste of oriental countries; and these manufactures are, though to a limited extent, still in existence. The other articles made consist chiefly of arms, earthenware, leather, paper, and jewellery.

The commerce of Persia has at no time been considerable. Besides insecurity of property, it has to contend with various natural obstacles,—roads have scarcely ever existed, navigable rivers are unknown, and the seaports are few and unimportant. The only means of transport is on the lacks of camels, mules, or small horses; hence the price of all commodities becomes greatly enhanced by the expense of carriage. The principal raw exports are silk, cotton, tobacco, rice and grain, dried fruits, sulphur, horses, wax, and gall-nuts; and the amount of the three first might be greatly extended. Of manufactured goods Persia sends out only a few,—almost entirely to Russia,—consisting of a considerable quantity of silk and cotton stuffs, with some gold and silver brocade. Besides Russia, the principal intercourse is with Turkey, Bagdad, Arabia, the Usbecks and Turkomans on their northern frontier, and India. In dealing with all these countries except the last, the balance of trade is in favour of Persia, and the excess of her exports is returned in buillon (composed of ducats, dollars, German crowns, and silver rubles), which is chiefly transported to India in return for the large surplus produce brought thence annually either by way of Bushire or of Cabul to Herat and Yezd, and destined to supply the countries towards the west. The total imports are said to exceed in value £3,000,000.

British manufactures are sought after to an extent only limited by the means of the purchasers. Regarding English cloth—a leading import—Lieutenant Burnes states:——i When I was in Persia in the end of 1833, the colours most in request were Oxford blue, blue, and brown; next year they may change to red and gray; but it may be remarked that if dark coloured they generally sell best. The outer garment of most respectable persons is mad

MEASURES, WEIGHTS, MONEY, REVENUE, &c.

The Measures and Weights vary not only in gage or fursoch, the space walked over by a horse different places, but also according to the purposes for which they are employed. The common cubit or guz = 25 Imp. inches; the roles; the rows of the common cubit or guz = 25 Imp. inches; the roles; the rows of the common cubit or guz = 25 Imp. inches; the Tabris archin = 44 Imp. inches. The league or parasang = 1 th of Imp. Imp. inches. The league or parasang = 1 th of Imp. inches. The

man, of which there are innumerable varieties:
the batman of Tabriz of 6 rattels, 300 derhams,
or 600 miscals = 654 lbs. avoird.; 2 batmans of
Tabriz = 1 batman of Shiraz. Gold and aliver
are weighed by the derham = 150 troy grains
nearly; but the miscal or i derham of Bushire is
only 71½ troy grains, or about 3 dwts. The abas,
pearl weight, = 2½ troy grains.

Money.—The common integer of account is the
towns, an imaginary money, divided into 8 reals.

Money.—The common integer of account is the
towns, an imaginary money, divided into 8 reals.

Money.—Weight Commence with Britain was con-

the batman of Tabriz of 6 rattels, 300 derhams, or 600 miscals = 6-34 lbs. avoird.; 2 batmans of Tabriz of 6 rattels, 500 derhams, or 600 miscals = 6-34 lbs. avoird.; 2 batmans of Tabriz = 1 batman of Shiraz. Gold and slive is bordering on Turkey and Russian rubles, or manets; the latter current only in the districts only 711 troy grains, or about 3 dwts. The shas, pearl weight, = 24 troy grains.

Money.—The common integer of account is the toman, an imaginary money, divided into 8 reals, 10 sahib-karanns, 29 panabats, 50 abaseis, 100 cuided october 28, 1841.

Art.1. The merchants of the two mighty states "are reciprocally adowd to bay and sell in any part; and on the goods which they import, customs duties shall be levied on reduced to any certain or uniform standards; the principal are,—in gold, the mahomet-shable,

The coins are too variable to admit of being out; the amount of each being that levied on reduced to any certain or uniform standards; the merchandise of the most favoured European naprincipal are,—in gold, the mahomet-shahle, tions.

worth about 10s. 6d., and the bigscle, 9a; in a five, the sahlb-karsum, and the panabat; gold resident at Bushire, is allowed to have consult tomans and silver rupees of different values also only at Teheran and Tabriz. Persia is to have circulate near the seacoast. A variety of foreign consuls at Bombay and London.

PERSIAN, a plain silken fabric, exceedingly flimsy in texture.

PERSONAL PROTECTION, in the Bankrupt Law of Scotland, is a judicial content of the property of the p

act, having the effect of shielding a debtor from arrest for civil debt. It is a prerogative of the Court of Session, and was formerly an act of judicial discretion. Although now granted as a matter of routine, in virtue of statutory regulations, it is still in the power of the court to withhold it on cause shown. By the Sequestrathough now granted as a matter of rounte, in virtue of statutory regulations, it is still in the power of the court to withhold it on cause shown. By the Sequestration Act (2 & 3 Vict. c. 41), the Lord Ordinary, who awards sequestration, grants a warrant of protection, to endure till the meeting for electing the trustee (§ 13). At that meeting, or the meeting after the bankrupt's examination, or at any special meeting for the purpose, a majority in number and value of the creditors present may resolve to authorize the trustee to apply for a renewal of the protection (§ 58). [SEQUESTRATION.] By the Cessio Bonorum Act (6 & 7 Wm. IV. c. 56, § 15), the Court of Session and the Sheriff are respectively empowered, in casee before them, on proof of the statutory notices to the creditors, to grant warrant to liberate the debtor if he is in prison, and if he is at large to grant him personal protection, on his lodging with the clerk of court "a bond, with a sufficient cautioner, binding themselves that he shall attend all diets of court whenever required, under such penalty as may be reasonable, and which, if forfeited, shall be divided among the creditors." [Cessio Bononum.]

PERU extends 1680 miles along the W. coast of S. America, from lat. 21° 28' S. to lat. 3° 30' N. Boundaries, N. Ecuador; E. Brazil and Bolivia; S. Bolivia; W. Pacific Ocean. Arca, 485,000 sq. miles. Population, 1,800,000, of which 240,820 are Spanish Creoles, the rest Mestizoes and Indians. Capital, Lima; pop. 70,000. Government, republican; the legislative body consists of a senate and house of representatives; the executive is vested in a president, assisted by a ministry and a council of state. S

Peru is naturally divided into three regions, which differ greatly in climate and productions.

The "Valles," or coast region, covering 92,600 sq. miles, the greater part analy or stony wastes, but having the valleys with which it is furrowed rich and well cultivated. The climate is dry, moderately warm, and very healthy; and the European cerealia, maize, rice, and the sugar-cane, are cultivated; also the fruits of 8. Europe, including the vine, from the produce of which both wine and brandy are manufactured. Nitrate of soda abounds in the southern districts, and salt is procured on the shore.

2. The "Montana," or region of the Andes, extends about 205,000 sq. miles; its eastern half is covered with forests, but the western mountains are nearly bars. Several of the valleys, particularly that of the Rio Jauja, are fertile and moderately well cultivated. The cerealia and fruits of Europe are grown in the higher districts, and tropical products, including coca, in the valleys; while in the eastern forests, cinchons bark, copaiba, copal, and other drugs are procured. On the pastures of the table lands, many cattle, horses, and mules are reared; also liamas, used as beasts of burden on the high ridges. This region abounds in minerals, particularly silver, the mines of which, at Pasco and Gualgayoc, are the richest in S. America. [Bullion.] Quicksilver is obtained at Huancavelica, and gold occurs in several streams; iron, lead, opper, and brimstone are laso found.

3. The "Eastern Plains," extending 187,000 sq. miles, consist of forests alternating in some places with savannas; the whole uncultivated; though, as far as known, this is the most fertile region of Peru. In the forests the Indians procure vanilla, sarvaparilla, copaiba, copal, canoutchouc, and other gums and resins, which are sent to the Brazilian settlements on the Amason.

Manufactures can scarcely be said to exist; and inland trade is impeded by the mountainous nature of the country, and the want of carriage roads, a defect not supplied by navigable r

sugar, wine, brandy, sait, and other commodities are sent; but the most important is that with Europe and the United States, to which Peruvian and Bolivian produce were exported in 1838 to the amount (exclusive of \$229,833 of Colombian and Central American produce), of \$8,061,563, or £1,612,318. Of this, \$6,549,062, or £1,308,412, consisted of bullion; whereof, \$1,718,206 were shipped from Bolivia, and \$4,823,836 from Peru: the remainder was made up of 31,008 quintals wool, in value £53,486; 30,412 quintals cotton, £79,043; 129,643 intrate of soda, ahipped wholly from Iquique, £51,844; besides 5479 quintals bark; 3748 dozen chinchiliaskins; 19,073 quintals copper ore, or barilhas; 8155 hides; 14,900 quintals sugar; and 6256 quintals tim. The exports also embraced cinchona, sarsaperilla, and other drugs. About two-thirds of the bullion, and the great bulk of the other articles, were sent to Britsian; the remainder mostly to the United States and France.

The imports consist chiefly of British manufactures, mostly cottons, but embracing likewise considerable quantities of wooliens, linens, silka, and hardware; the whole (as valued in Britain), amounting, 1838, 1839, and 1840, respectively, to £419,195, £635,058, and £739,991; which was exclusive of quicksilver and other foreign goods reshipped from Britain. A variety of manufactured articles are likewise brought from the United States and France.

Powrs.—Callao, distant 6 miles from Lima, of which it is the port, lies on the N. side of a tongue of land, in lat. 19° 4′ S., long. 77° 14′ W. It is well fortified; but the houses are mean-looking. The roadstead is the best on the Peruvian cosst; and there is a rude pler accessible to large vessels. In 1839, 60,749 tons of shipping entered, including 11,394 tons British.

Arica, farther S., in lat. 18° 28′ S., long. 70° 24′ W., is, owing to a heavy surf, of difficult and sometimes impractleable access, except on the inflated seal-akin floats or belazes of the natives. It is, notwithstanding, a rising port, being the ou

MEASURES, WEIGHTS, MONEY, FINANCES, &c.

Measures, Weights, Money, Finances, &c.

Measures and Weights, same as Spain.

Money.—The integer of account is the dollar of 8 reals, smually estimated in Peru, in conversions into sterling, at 4s. The Peruvian dollar is coined at the rate of 8 to the mare of siver, of 100,000, or £1,000,000, or £2,000,000, or £2,000,0 and as mixtures and adulterations are also common, great experience is necessary to select the finer kinds. Of these, the four following are distinguished by British

to select the mer kinds. Of these, the four following are dissinguished by Erisian druggists.

1. Crown Bark (Sp. Cassarilla fina de Uritusinga), the produce of the C. Condaminea of Humboldt, found near Lox, is quilled, straight, 6 to 15 inches long, from the size of a crow-quill to that of the thumb in dameter, and in thickness from 1-30th to 1-6th of an inch. Epidermis entire, with external surface longitudinally furrowed, and crossed with fissures; it presents various that of gray, irregularly covered with minute white lichens. Inner surface and powder of a cinnamon brown colour. Taste, bitter, somewhat acid, aromatic, and astringent; odour, faint, peculiar, and aromatic. The quills of middle size are preferred.

2. Grav Bark (Sp. Cascarilla provinsiana), also called silver bark, and Huanco bark, procured from the C. Scrobiculate of Humboldt, is exported from Lima. It occurs in quills larger than the preceding, less furrowed, more uniformly grayish-white, inside redder, fracture closer and more resinous; epidermis entire. Taste and odour nearly identical with crown bark.

3. Yellow Bark (Sp. Cascarilla Calisage), the source of QUININE, is shipped at Arica, but its origin is doubtful. It occurs partly quilled and partly flat. The quills, larger than the crown and gray, are 9 to 15 inches long, 1 to 9 inches in diameter, and 1-8th to 1-3d inch thick; grayish-brown, mottled with lichens. Inner surface smooth, and yellower than the preceding kinds. Transverse fracture close but splintery. Taste and odour stronger than crown. The flat pieces, often stripped of their epidermis, are 8 to 18 inches long, and 1 to 4 inches broad. Good flat bark is preferred to the quilled; and the finest are the middle-sized pieces, dense and close in texture. Cuzco bark and Orange bark are sometimes substituted for this kind.

4. Red Bark (Sp. Cascarilla colorads), also of unknown origin, consists sometimes of quilled, but more commonly of fistials pieces, from 2 inches to 2 feet long, 1 to 5 inches broad, and ½ to \$2 L.

inch thick; generally covered with the epidermis, which is rough, wrinkled, little fissured, reddishbrown, with grayish efflorescence in the hollows, from lichens. Taste very bitter and astringent. The quills, similar in size to those of yellow bark, are paler than the flat pieces. Red bark is scarce, dear, and rarely seen genuine.

The inferior, yet still genuine kinds, are chiefly,—Ash-bark, of unknown origin, mostly used for adulterating crown: Rusty bark, imported from Lims, little esteemed, and in Britain purchased only for the German market: White Loxs bark differs little from Rusty: Hard Carthagens bark, and Woody Carthagens bark, both quilled and flat, are little valued: Cuzco bark, as good species, very bitter, is rare in the English trade: and Orange bark of Bogota, which resembles yellow bark, but is spongy, and feebly bitter; it is rare in Europe. Pale bark is an old vague commercial term applied to inferior barks. The spurious barks used in adulterations are chiefly species of Exostemma, Buena, and Strychnos. For farther details, we refer to Dr Christion's Dispensatory, the work chiefly used in compling this article.

Cinchona bark is brought to the United Kingdom in chests or serons, from Chill and Peru. The quantity imported varies greatly from one year to another; but on an average of the five years to 1840, it amounted to nearly \$20,000 lbs., of which about 90,000 lbs. were entered for home consumption, and the rest re-exported to the Continent.

PETROLEUM, a bituminous kind of mineral oil: at the usual temperature it is rather thicker than common tar, and has a strong disagreeable odour. When exposed to the air it thickens, and passes into a species of bitumen. An oil similar to naphtha is obtained from it by distillation. It is principally found in coal districts. Its chief localities in this country are, Ormskirk in Lancashire, Coal Port near Colebrookdale, and Pomona, one of the Orkney Isles. In Asia it is found plentifully, and its uses to the inhabitants are important: from Mosul to Bagdad it is used instead of oil for lamps; when mixed with earth or ashes it serves for fuel. PEWTER is opmmonly made of 4 parts of tin and 1 of lead; but a fine kind is said to consist of tin mixed only with a little antimony and copper. It is used in the manufacture of drinking-vessels; formerly plates and dishes were also made of this allow.

made of this alloy.

PHILIPPINE ISLANDS, an extensive group in the N.E. extremity of the Indian Archipelago, betwixt lat. 5° and 20° N., and long. 120° and 126° E. The Indian Archipelago, betwixt lat. 5° and 20° N., and long. 120° and 126° E. The chief islands are Luzon or Luçonia, Mindoro, Panay, Negros, Masbate, Zebu, Bohol, Leyte, Samar, and Mindanao. The whole are claimed by Spain; but several of them are independent. Population subject to that kingdom, in 1837, 3,202,760, of which 2,264,807 were in Luzon; chiefly Papua negroes, Malays, and other Eastern tribes, with about 3000 Europeans. The government is vested in a captain-general, who has extensive powers. These islands have been possessed by Spain since 1564. They were taken by the British in 1762, but restored in 1764.

has extensive powers. These islands have been possessed by Spain since 1564. They were taken by the British in 1762, but restored in 1764. So They were taken by the British in 1762, but restored in 1764. So They were taken by the British in 1762, but restored in 1764. So They were taken by the British in 1762, but restored in 1764. So They were they are moistures. The rainy and windy season generally lasts from May until September, sometimes so late as the beginning of December: in June and July, the winds sometimes blow with incredible fury in the N. part of Luxon. Notwithstanding their tropical latitude, the height of their mountains and sea-breezes prevent the heat from being oppressively severe; and as a general spring continues a large proportion of the year, if the atmosphere were less moist, the climate would be unobjectionable. To this redundant moisture, however, must be attributed the great inxuriance of the country.—the trees being always covered with leaves and the soil with vegetation. The islands are capable of producing all colonial commodities. In several places there are mines of gold and iron, but they are not worked. The chief object of cultivation is rice, which, with flain, forms the ordinary food of the natives. The other products resemble those of tropical countries in general,—including sugar, chiefly cultivated in the plain of Pampanga in Luxon, coffee, and tobacco of superior quality, indigo, and a variety of commodities peculiar to the Eastran Islands; timber, well adapted for shipbuilding, is found in Luxon, also damar and a species of native hemp. Of late years the demand for oplum in China has led to the introduced by the Spaniards have multiplied so much that they run wild among the mountains, and are destroyed in large numbers for the hides. Fish abound in the bays and creeks.

The geographical position of the Philippines is most favourable for commercial intercourse with India, America, Australia, and China. Their vicinity to China is indeed their most distinctive peculiarity, t

including considerable quantities of British cottons and wooliens, are imported through various

ts are kept in dollars ; and the measures and weights are partly Spanish and partly Chines

including considerable quantities of British cottons and woollens, are imported through various channels.

Accounts are kept in dollars; and the measures and weights are partly Spanish and partly Chinese PHOSPHORUS is usually obtained by acting upon powdered bone-carth with sulphuric acid. When pure, it is tastelese, colourless, or of a pale buff hue, semitransparent, and flexible. Sp. gr. 1-770. When exposed to the air it undergoes a slow combustion, exhaling luminous fumes of a peculiar odour, and hence the necessity of preserving it in water. Phosphorus and some of its combinations are used in medicine, and for certain purposes in the arts.

PIANO FORTE. [Musical Instruments.]

PIASTRE, the dollar of exchange in Spain, where it is also called the Peso de Plata, is an imaginary money estimated at 8 reals old plate, or 15 reals 2 maravedis vellon; and as the hard dollar [Dollar] is worth 20 reals vellon, the piastre is equivalent at par to 3s. 13d. sterling. The piastre or pieces of eight was formerly a silver coin worth about 4s. 6d., being in fact the old dollar. The piastre is also a coin and money of account in Turkey, where, however, it is now so much depreciated as to be worth only from 2d. to 24d. sterling.

PIC, on PIKE, a Turkish cloth measure, equal \(\frac{1}{2} \) imparts.

PILCHARD (Fr. Sardine, Pilamide. Gen. Sardelle. It. Sardine. Sp. Sardina arenque), a species of herring (Clupes pilabardus), about the same length as that fish, but having its body thicker and rounder, and its scales larger. It frequents the British seas, but is only found in great numbers on the shores of Devon and Cornwall, chiefly from Dartmouth to Fadstow, round the Land's End ; the principal fishing stations are, St Ives, Mountsbay, St Mawes, and Mevagiesey, where they arrive in shoals in August and September, and again in November or December; and are caught both by seans and by drift-nets. They are sold on the beach at about 1s. per 100. Those intended for curing are first salted in heaps, and then packed into hogsheads,

warden; and such license, which is only to be granted after an examination of the qualifications of the person seeking to obtain it, may be suspended in cases of negligence or misconduct. In other parts of the United Kingdom, pilots are appointed and regulated, either by local acts of Parliament, or by ancient charters of incorporation; but several provisions in 6 Geo. IV. c. 125, are applicable to all parts of England.

In all those parts of a voyage where a pilot is employed by regulation or usage, termed "a pilot's fairway," one must be obtained (Vide Abbot on Shipping). The owner or master of a vessel having a pilot on board, licensed by the ordinary custom of the place, is not responsible for any damage which arises from neglect or want of skill on the part of the individual appointed. But his proceedings must not be controlled by the master. On the other hand, the presence of a pilot does not absolve the master from the consequences of injury caused by his own carelessness or want of skill.

own carelessness or want of skill.

In some foreign countries the term pilot is further applied to an officer whose special duty it is to steer the vessel during the general course of the voyage. No such officer, however, is known either in the British merchant-service or ships of war. In the latter, the charge of the helm is one of the many duties of the mas-

ter and his mates

war. In the latter, the charge of the nem is one of the many dates of the master and his mastes.

PIMENTO (Fr. & Ger. Piment. It. Pepe garofanato), a small, dry, reddishbrown berry, the fruit of a tree (Myrtus Pimento) common on the N. side of Jamaica, whence it is called Jamaica pepper. It is also named Allspice, from its taste and flavour (qualities which reside chiefly in the cortical part of the berry's being supposed to resemble that of a mixture of cloves, cinnamon, and nutmegs. The berries are gathered before they are ripe, and dried in the sun; the smallest and most fragrant being preferred. The produce of the pimento crop, though sometimes very abundant, is variable; and there is seldom a plenteous harvest above once in five years. A corresponding fluctuation occurs in the annual importations into Britain, which vary from about 1,000,000 lbs. to upwards of 3,000,000 lbs. With the exception of a small quantity from the United States and other places, pimento is imported wholly from Jamaica, the produce of which has declined considerably of late years. It is packed either in bags or hogsheads. On an average of the five years to January 1842, the quantity imported was 1,181,435 lbs.; entered for home consumption, 304,164 lbs. The excess of the former above the latter was re-exported to the Continent, and to British America and Australia. S

PINCHBECK, a factitious metal recembling brass, but containing more copper. PINE, a family of trees (Pimus) mostly inhabiting the northern parts of Europe and America. They almost all affect siliceous sandy soils, but many will flourish in rocky and comparatively barren lands. The trees are various in size. Their

in rocky and comparatively barren lands. The trees are various in size. Their chief use is in domestic architecture; whence the pine has been called "the builder's tree." Having usually, however, a long, straight, conical, undivided trunk, several kinds are prized for ship-masts. They all yield resinous matter. The chief species are the following:—

The Common Pine or Scotch Fir (P. Sylvestris).—This species, of which there are many varieties, stands in the first rank of forest trees, whether as regards its bardy habits, its rapid growth, or its value in the production of useful timber, the "red deal" of the carpenter. The best is that nearest the root. In Scotland, the fir often acquires a great size, the climate being well suited to it. In England, it is chiefly valued as a screen or nurse to other trees. Dense forests of it cover the mountainous tracts of Northern Europe, the timber of which, with its resinous products, Tar., etc., man dynamins, forms the great staple of many of the Baltic states. The finest is the Norwegian: that shipped from Memel, Riga, and Dantsic is inferior to it, though still good.

The Common or White Lard (P. Lerks), a native of Switserland, Remeis, and Siberia, grows very erect, with drooping branches, gradually diminishing from the base, and giving it a pyramidal form. No tree has received greater attention in modern times from the British planter. It was introduced into Scotland by Lord Kames in 1734; many millions were afterward planted on the Aitholl estates; and it is now extensively cultivated upon barren exposed land throughout Britain. It grows rapidly, and produces timber of great excellence, both for domestic purposes and shipbuilding: it is equally good throughout its thickness, possessing no sap-wood. The larch also yields "Venice turpentine," and its bark is nearly as valuable as that of the cak.

The Norward Brruce Fire (P. Abics), which attains a height of 180 feet, constitutes, with larch, the greatest proportion of the vast woods of Norway and Sweden. It is inferior to larch, though durable and of a fine even grain. In the market it is called white or Christianis deal. The tree attains a large size on cold damp clays, situated on declivities.

The Black or Red Spruce Fire (P. Nigra or Rubra) grows in the most inclement regions of N. America, especially in swampy valleys having a deep black soil. Its timber—str

White Spruce (P. Alba), often found along with it in America, is smaller, and yields inferior timber.

The Weymouth of American White Pine (P. Strobus), with an erect and lofty trunk, is a native of Canada and of the more northern districts of America. It grows very first in sheltered situations and moderately moist sandy soils; and produces the clean, white, soft, but perishable timber, called in America. "Pine," largely exported in the form of deals both to Europe and the West indies. It is also much used in shipbuilding.

The Yellow Pine (P. Mitti) is a fine tree, inhabiting the pine forests of North America, yielding timber of great value both for domestic and naval architecture, provided the sup-wood is removed. In Britain it is regarded as very durable, and in America it ranks next to The Strunk from 18 to 18 inches in diameter for 9-3ds of its length. It produces light, clear, and durable timber, which is extensively used in shipbuilding, especially for masts; also abundance of tar. The chief other species are the Cedar (Cedar): the Red Pine (P. Restrosa) of Canada, yielding a fine-grained strong durable wood of a close texture: the Corsican Pine (P. Lartico), a noble tree of S. Europe, extensively used by the French in shipbuilding: and the Silver Fir (P. Picca) liftle value; but a great deal of the essence of spruce is obtained from its shoots, and its bark is exceedingly valuable. [Timber.]

PINE-APPLE, the well-known succulent fruit of a tropical plant (Ananassa sativa), indigenous to America and the W. Indies, but commonly reared in hothouses and pots in Britain. It is the most luscious fruit produced in this kingdom, where its noble appearance has always rendered it a special object of horticultural enterprise. In England it has been obtained of a size weighing 14 lbs. In its aboriginal state it is inferior; and except perhaps the Burmese pines, the most delicious specimens are the produce of this country. SPINK ROOT. [SPIORLIA].

PINS (Fr. Epingles. Ger. Stecknadeln) are made on a great scale at Birmingham, where some manufacturers employ several hundred persons in the fabrication of these little instruments; they are also largely produced at Warrington, Sheffield, Gloucester, and London. Of late several beautiful inventions have been successfully employed to make pins almost entirely by machinery. The number daily made in this country for home use and exportation is estimated by Dr Ure at fifteen millions.

millions.

millions.

PINT, a British measure equal ith part of a gallon. [Measures.]

PIPE, a wine measure varying in different places. [Measures.]

PIPE-CLAY, a very plastic and tenacious kind of clay, of a grayish or yellowish-white colour, found near Poole in Dorsetshire, in the Isle of Purbeck, and other places. It is manufactured into tobacco-pipes; and is besides used as the basis of the queensware pottery, as well as a detergent by scourers of cloth.

PISTACHIO NUTS (Fr. Pistaches. Ger. Pistachen. It. Pistacchi, Fastucchi), used at the dessert and for confections, are the fruit of a small tree (Pistacia vera) indigenous to Syria and Persia, but now naturalized in the S. of Europe. They are moderately large, of a red or pink colour, and contain a greenish kernel, having

indigenous to Syria and Persia, but now naturalized in the S. of Europe. They are moderately large, of a red or pink colour, and contain a greenish kernel, having a pleasant, sweet, unctuous taste, resembling that of almonds. They are imported into Britain from Turkey, France, Sicily, and other places.

PISTOLE, a Spanish gold coin, equal 4th of the Doubloon.

PITCH, a substance made by melting coarse hard resin with a portion of tar, generally one-half; but the quantity is increased or lessened according to the consistence of the letter of the letter.

sistency of the latter.

PITCH BLENDE, a ponderous metalliferous ore, of a blackish colour, much valued by porcelain painters. Localities—Saxony, Bohemia, Hungary, and Cornwall.

PIX, the name given to a box kept at the British mint, in which a small sample of the coins struck are deposited, in order to be assayed and compared with a standard preserved in the Exchequer. This operation, called the "Trial of the Pix," is performed in presence of certain members of the Privy Council, the officers of the mint, and a jury of the Goldsmiths' Company. An account of this ancient ceremony will be found in Ruding's "Annals of the Coinage." It now usually takes place on the appointment of a new master of the mint before his predecessor. takes place on the appointment of a new master of the mint before his predecessor receives a discharge.

PLAICE, a species of flounder (*Platessa vulgaris*) taken in abundance on the coasts of Britain and Ireland. It spawns in February or March; and is in the best condition for the table at the end of May.

PLANE, a British forest tree (*Platinus*), admired for its beauty; but of little

value except for fuel.

PLANTAIN, a delicious fruit, yielded by the Musa sapientum, a plant about 15 or 20 feet in height, found in most tropical countries. It closely resembles the banana; is at first green, but when ripe of a pale yellow colour, about a foot long, and nearly two inches in diameter. In favourable situations, however, it is to be found of nearly a foot in circumference, with a length of seven or eight; and a bunch sometimes contains from 160 to 180, and weighs from 66 to 88 lbs. It is generally cut when unripe; and after being skinned is roasted and served up as bread. It is also used for fattening domestic animals. [Blanka].

The second secon tion of the preceding, of base metal, coated over with gold or silver. The gold-beaters' trade is carried on in London, and, though to an inferior extent, in Birmingham, Dublin, Edinburgh, Glasgow, and Liverpool. Silver and silver-plated

goods are made chiefly in London, Birmingham, and Sheffield. The quantity of gold and silver articles manufactured in the United Kingdom is considerable; but beyond the produce of the duties, mentioned below, we possess no data for computing its amount. The value of plated wares annually consumed has been estimated so high as £1,200,000,—this department having derived great advantage from the perfection of the machinery now used in this country for rolling metals; while it has no doubt likewise received encouragement from the heavy duties imposed on gold and silver articles. The declared value of the plate, plated ware, jewellery, and watches, exported from the United Kingdom, in the years 1838, 1839, and 1840, amounted respectively to £240,584, £274,305, and £204,427; sent chiefly to India, the colonies, and the United States.

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ASSAY REGULATIONS, LICENSES, DUTIES, AND DRAWBACKS.

r 18, and the new sterling with the figure of

ber 18, and the new sterling with the figure of Britannia.

Articles of all standards capable of bearing a stamp are also marked with the maker's initials, the arms or device of the assay office, and a letter indicating the year. The device of the Goldsmiths' Office, London, is a leopard's head; of the Assay Office, Birmingham, an anchor; of Bleffeld, a crown; of Newcastle, three castles; of Dublin, a harp and crown; of Edinburgh, a castle; and of Glasgow, a tree with a boil and fish. The letter used by the Goldsmiths' Company indicates the year by beginning the alphabet in May 1796, and reckoning on to 30 letters progressively, omitting J and ending with U. The first 30 years is represented by a Koman capital; the second, commencing May 1816, by small Roman characters; the third, commencing May 1836, by old English capitals.

On articles for which a duty is paid, an impression of the queen's lead is likewise stamped.

The cuttings of the articles sawayed are kept in each office in the Pix [Pix] or "Diet livx," in order to be proved before the proper officer.

Assuad Licensee, payable in Britain by dealers in gold and silver plate, in which gold exceeding 2 dwts. and under 20s., or of silver exceeding 5 dwts. and under 20s., or of silver exceeding 6 dwts. and under 20s., or of silver exceeding 6 dwts. and under 30 s., or of silver exceeding 6 dwts. and under 30 s., or of silver exceeding 6 dwts. and under 30 s., or of silver exceeding 6 dwts. and under 30 s., or of silver exceeding 6 dwts. and under 30 s., or of silver exceeding 6 dwts. and oner 30 s., or of silver exceeding 6 dwts. and oner 30 s., or of silver exceeding 6 dwts. and oner 30 s., or of silver exceeding 6 dwts. and oner 30 s., or of silver exceeding 6 dwts. and oner 30 s., or of silver exceeding 6 dwts. and oner 30 s., or of silver exceeding 6 dwts. and oner 30 s., or of silver exceeding 6 dwts. and oner 30 s., or of silver exceeding 6 dwts. and oner 30 s., or of silver exceeding 6 dwts. and oner 30 s., or of silver the silver exceeding 6 dwts.

ASSAY Regulations and Marks.—Articles of gold must be of the fineness of 2 carats, or \$\frac{1}{2}\text{thairs}, neckiaces, beads, lockets, filigree work, the money standard, or of 18 carats: the latter is employed chiefly for watches and rings. Silver or must be of the fineness of 11 oz. 2 dwta., or \$\frac{3}{2}\text{tha}, the money standard, or of 11 oz. 10 dwta.; but the latter, called "new sterling," is seldom used.

[Carat. Corn.]

All gold and silver articles of the money standard are marked with the following devices: in Ireland a figure of Hibernis. The gold standard of 18 carats is in addition marked with the number 18, and the new sterling with the figure of stude, not having apparel, solid silver buttons and solid per 18, and the new sterling with the figure of stude, not having a biselled expected on, chains, necklaces, beade, lockets, filigree work, shirt buckles or brooches, stamped medals, and spouts to china, stone, or earthenware teapots, of any weight whatever; tippings, swages, or mounts, not weighing 10 dwix of silver each, and not being necks or collars for castors, cruets, or glasses appertaining to any sort of stands or frames; wares of silver, not weighing 5 dwix each: this exemption is not to include necks, collars, and tops of castors, cruets, or frames, buttons to be affixed to or set on any wearing apparel, solid aliver buttons and solid studs, not having a bizelled edge soldered on, wrought seals, blank seals, and bottle tickets, shee claspe, patch boxes, sait spooms, sait ladies, tea spoons, tea strainers, caddy ladies, bockles, and pieces of garnish, cabinets, knife cases, tea chests, bridle stands or frames. (53 Geo. III. c. 69; 55 Geo. III. c. 185; 1 Geo. IV. c. 14; 6 & 7 Wm. IV. c. 69.

In Ireland the duty, formerly is, per oz. on both gold and silver plate, was raised in 1842 (Oct. 10) to the same rates as in Britain.

On the exportation of Irish plate to Britain a countervailing duty of 16a, per oz. on silver; equivalent drawbacks being allowed on the exportation of British plate to Ireland; but these are now abolished.

The net produce of the stamp-duties on plate

omitting J and ending with U. The first 20 years is represented by a Roman capital; the second, commencing May 1816, by small Roman characters; the third, commencing May 1836, by old English capitals.

On articles for which a duty is paid, an impression of the queen's head is likewise stamped. The cuttings of the articles assayed are kept in each office in the Pix [Prx] or "Diet Bix." is an exportation to other countries the whole utiles are drawn back, debentures for which are in gold and silver plate, in which gold exceeding 2 dwts.

Annual Licenses, payable in Britain by dealers in gold and silver plate, in which gold exceeding 2 dwts. Annual Licenses, payable and plate. The very pawnboker and refiners of gold or allyer pace to silver lace is not deemed plate.

Stamp Duties in Britain on plate made since August 31, 1815; namely, gold, 17s. per oz. Exemptions, gold watch-cases, rings, and any articles of gold not exceeding 2 oz. in weight; allery watch-cases, PLATINUM, a metal of a colour between steel-gray and silver-white. Sp. gr.

PLATINUM, a metal of a colour between steel-gray and silver-white. Sp. gr. 21.5. It is very hard, and possesses great malleability and ductility. It may be beaten into fine leaves, and drawn into wire not exceeding 1-2000ths of an inch in diameter. When about 1-13th of an inch thick it sustains a weight of 270 lbs. This metal is extremely difficult of fusion; but it has the property of being united by welding either one piece to another, or with iron and steel. This property admits of useful applications in the arts; wires may be joined so as to form rings and chains; and with a view to economy, platinum may be stacked to iron or steel for chains; and, with a view to economy, platinum may be attached to iron or steel for many scientific purposes. The perfection with which vessels of platinum resist the action of heat and air, of most of the acids, and of sulphur and mercury, renders them peculiarly valuable in many chemical applications; and, not withstanding the

high value of the metal, which is worth between four and five times its weight of silver, it is now much employed for crucibles, retorts for the distillation of sulphuric acid, mirrors for reflecting telescopes, and also by gunsmiths. In Russia it is made into coins.

Platinum was discovered about 1741; but it attracted little notice until the mode of purifying it and rendering it malleable was discovered by Dr Wollaston. It is found in the metallic state in Brazil and Peru; in Antioquia in South America; in Estremadura in Spain; and lately in considerable quantities in the Uralian Mountains. The general appearance of it in the rough state in which it is imported in that of small grains or scales darker than silver and extremely heavy is that of small grains or scales, darker than silver, and extremely heavy. PLEDGE. [Pawn.]

PLUM, the well-known fruit of a tree (*Prunus domestica*), indigenous to the greater part of the northern hemisphere. Of this fruit no fewer than 274 varieties are enumerated in the Catalogue of the Horticultural Society. Dried plums form

are enumerated in the Catalogue of the Horticultural Society. Dried plums form an article of commerce under the name of prunes and prunelloes. They are largely imported into this country, especially from France. The timber of the plum-tree is close and strong; and the bark may be used in dyeing yellow.

PLUMBAGO, on BLACK LEAD, is the well-known opaque blackish-gray glistening substance used in the manufacture of pencils, for which purpose the best is that procured near Borrowdale in Cumberland. [Pencil Manufacture.] An inferior soft kind is imported from the East Indies. Plumbago is also employed for making crucibles, in compositions for protecting iron from rusting, and for for making crucibles, in compositions for protecting iron from rusting, and for

diminishing friction in machinery. S

POLACCA, a vessel with three poles or masts, each of one piece, so that the topsails, on being lowered, can slide down without interruption. This form of rig originated in the suddenness and frequency of squalls in the Mediterranean, where alone vessels of this kind are used.

POLICY OF INSURANCE is the written instrument under which the con-

tract of insurance is effected. S

tract of insurance is effected. B

IN MARINE INSURANCE, there are two descriptions of policy—open, and valued.

In the former, the pecuniary amount of the interest insured is not stated, but remains to be afterwards adjusted. In the latter, a value is set on the interest insured, and being assented to by the underwriter, it is presumed to be the real value, and to be the sum payable in case of loss. A nominal valuation, however, will not be sanctioned as a cover to a wager or a fraudulent transaction; and if the insured has a surface to the sum faying the payable over-valued his interest he will not recover even for be found to have designedly over-valued his interest, he will not recover even for the loss actually sustained. The amount which should be covered by a valued the loss actually sustained. The amount which should be covered by a valued policy, is the real value of the ship, or the prime-cost of the goods, as the case may be, at the time of effecting the policy, together with the amount of the premiums and other expenses of insurance. The provisions of the 19th Geo. II. c. 37, which prohibit wager-policies, are satisfied if there be an interest, however inadequate to prohibit wager-policies, are satisfied if there be an interest, however inadequate to the value put upon it; and it appears to be the general principle that, except where there is fraud, such value is the final adjustment between the parties in the case of total loss. In the case of partial loss, there is no difference between a valued and an open policy. Before a policy is effected, the terms on which the underwriters will subscribe it are, at Lloyd's, generally noted on a "alip," which is signed by their initials. It has been decided that, unless it be stamped, this document cannot be received in evidence to contradict the policy, and it does not appear what stamp would be applicable. (Park, 347.) By statute, 11 Geo. I. c. 30, § 44, when an insurance is effected, a policy must be made out within three days, under penalty of £100. The usual form of the policy, as kept up by the old exclusive companies, is antiquated and cumbersome; but, with these disadvantages, it is supposed to have in its favour the conventional meaning which usage and a course of decisions have given to its terms. The following is the form:—

" In the Name of God. Amen.

"A B, as well in his own name, as for and in the name and names of all and every other persons or persons to whom the same doth, may, or shall appertain, in part or in all, doth make assurance, and cause himself, and them, and every of them, to be insured, lost or not lost, as and from Upon any kind of goods and merchandises, and also upon the body, tackle, apparel, ordnance, munition, artillery, boat, and other furniture of and in the good ship or vessel, called the whereof is master, under God, for this present voyage, E T, or whosever else shall go for master in the same ship, or by whatsoever other name or names the same ship, or the master thereof, is or shall be named or called; beginning the adventure upon the said goods and merchandises from the loading thereof aboard the said ship, upon the said ship, &c. And further, until the said ship, with all her ordnance,

tackie, apparel, &c., and goods and merchandises whatsoever, shall be arrived at upon the said ship, &c., until she hath mocred at anchor twenty-four hours in good safety; and upon the goods and merchandises until the same be there discharged and safely landed. And it shall be lawful for the said ship, &c., in this voyage, to proceed and sail to, and touch and stay at, any ports or places whatsoever, without prejudice to this insurance. The said ship, and goods and merchandises, &c., for so much as concerns the assureds, by agreement between the assureds and assurers in this policy, are and shall be valued at . Touching the adventures and perlis which we the assurers are contented to bear, and do take upon us in this voyage: they are of the seas, men of war, fire, enemies, pirates, rovers, thieves, jettisons, letters of mart and counter mart, surprisals, takings at sea, arrests, restraints, and detainments of all kings, princes, and people, of what mainers, and on a sure of the said goods and merchandises, and ship, &c., or any part thereof. And in case of any loss or misfortune, it shall be lawful to the assureds, their factors, servants, and assigus, to sue, labour, and travel for, in and about the defence, safeguard, and recovery of the said goods, and merchandises, and ship, &c., or any part thereof. Which up the sure of the said goods, and merchandises, and ship, &c., or any part thereof, without prejudice to this insurance; to the charges whereof, we the assurers will contribute each one according to the rate and quantity of his sum herein assured. And it is agreed by us the insurers, that this writing or policy of assurance shall be of as much force and effect as the surest writing or policy of assurance heretofore made in Lossberrd for the Royal Exchange, or elsewhere in London. And so we the assurers are contented, and do hereby promise and bind ourselves, each one for his own part, our heirs, executors, and goods, to the assureds, their executors, administrators, and assigns, for the true performance

It is usual to add the following provision as to liability for average losses in the case of certain destructible commodities:—

"N.B.—Corn, fish, salt, fruit, flour, and seed, are warranted free from average, unless general, or the ship be stranded.—Sugar, tobacco, hemp, flax, hides, and skins, are warranted free from average, under £3 per cent.—And all other goods, also the ship and freight, are warranted free from average, under £3 per cent. unless general, or the ship be stranded."

average, under £5 per cent.—And all other goods, also the ship as transded."

The requisites of a policy are generally divided into nine, which are,—
let, The Name of the Insured.—By 28 Geo. III. c. 56, policies without the name or firm of the parties interested, or of the consigner or consignee, or of the person residing in Great Britain receiving the order for or effecting the policy, or of the person giving directions to effect the same, are null. Where the persons interested were designed "The Trustees of Messrs Keighley, Ferguson, and Co.," the requisites were considered as complied with (1 Camp. 538).

2d. The Name of the Ship and of the Master.—A material misunderstanding in this respect will vitiate the contract; but to meet the effect of a mere mistake, it is usual to say, "or by whatsoever other name or names the same ship or the master thereof is or shall be named or called;" and where there is no mistake as to identity, these expressions will protect the policy. If a merchant cause three several parcels of goods to be insured for three different ships, and find it convenient to load the whole in one, it is held that he can only recover in the event of a loss for the amount nominally insured on board that vessel. It is a long-established practice to insure upon goods "on board any ship or ships," from a particular port; but it is said that this vague definition ought not to be adopted where the ship is known, as it "seems to amount to a representation, that the party effecting the insurance does not know in what ship the goods are to be brought." (Marshall, 321, 322.) shall, 321, 322.)

3d, The Subject-matter insured.—It is not necessary minutely to describe the property, farther than to the effect of exactly identifying it, and letting the underwriter know his risk. The usage of trade is consulted as a clue to the import of expressions which may not have a distinct meaning of their own, but will not be allowed to contradict what is clearly expressed. The word "goods" will be held allowed to contradict what is clearly expressed. The word "goods" will be held to include an ordinary cargo, stowed away in the proper manner, but not goods lashed on deck (unless they be such as it is proper and usual so to bestow, as vitriol), nor the captain's clothes and the ship's provisions. Where the interest is of the nature of a factor's lien, or of that description, it will be covered by a policy on "goods;" but freight must be specially insured by name. Money, jewels, and bullion may be insured as goods, if they are part of the cargo, and not on the persons of passengers.

pullion may be insured as goods, if they are part of the cargo, and not on the persons of passengers.

4th, The Commencement and Termination of the Voyage, and the consequent Duration of the Risk.—If a blank be left for the port of departure, or for that of destination, the policy will be void from uncertainty. It is said, however, that an omission as to time, when the risk is measured by the time, will merely have the effect of making it commence with the execution of the policy. The expression of at and from the shiu's leading nort" covers loss australias before departure on the shiu's leading nort" covers loss australias before departure on

" at and from the ship's loading port," covers loss sustained before departure, un-

less there be undue delay; to cover which the expression "in port" is considered necessary. Though the commencement and termination of the risk be distinctly necessary. Though the commencement and termination of the risk be distinctly expressed, if there is any thing in the terms calculated to deceive the underwriter expressed, if there is any thing in the terms calculated to deceive the underwriter as to those of the voyage, the insured will not recover; as, where a ship and goods were insured "at and from the coast of Brazil to the Cape of Good Hope, beginning the adventure on the goods, from the loading thereof on the coast of Brazil, and upon the ship in the same manner," and the goods were taken on board at the Cape, and carried to the coast of Brazil, where they were not unloaded, the risk was found not to have attached. (Robertson v. French, 4 East. 130.) The risk was in fact here described as commencing with the voyage, whereas it commenced during the voyage. Insurance from several ports of departure does not over a voyage from one to another. The insurance on goods is generally limited till the time when they are "discharged and safely landed;" and these operations must be conducted without undue delay. The underwriter is liable if the loss happen after transshipment into shallops, lighters, droghers, or launches, unless they be those of the insured. those of the insured.

those of the insured.

5th, The Perils insured against.—These must be distinctly enumerated; and they are described in general expressions, well understood in practice, from their long and unvarying application. It is usual to insert the words, "lost or not lost," by which the insurer takes upon himself the loss which may have already happened,—a term said to be peculiar to English insurances.

6th, The Premium or Consideration.—This is always expressed as received, and so the engagements are entirely on one side, namely, that of the underwriter. In practice, however, the premium is not paid to the underwriter, but stands in account between him and the broker. [Becker.]

7th, The common Memorandum, as given above, inserted to protect the underwriter from small losses on perishable commodities. In that form, an exception may be observed, of the ship being "stranded." This has been found to be "a condition;" so that if stranding take place, the insured is admitted to prove all his partial loss, whether directly occasioned by the stranding or not. On this being decided, in 1754 (Contillon v. London A. C., Marshall, 216-225), the London and Royal Exchange Companies left the alternative of "stranded" out of their policies. Where there is no stranding, there is no recovery for the articles enumerated in Where there is no stranding, there is no recovery for the articles enumerated in the memorandum, unless the loss be total; and so it was found where a cargo of fruit, having been captured and recaptured, was brought to the port of destination damaged 80 per cent. by the delay. (Park, 185.)

8th, The Date and Subscription.—It is the practice at Lloyd's not to insert the date in the body of the deed, but for each underwriter to attach it to his sub-

scription.

9th, The Stamp.—This is regulated by 55 Geo. III. c. 184, amended by 3 & 4 Wm. IV.c. 23. A policy cannot legally be stamped after it is executed; but, by 9 Geo. IV. c. 49, policies of mutual insurance, by which persons undertake to insure one another, may be fortified with additional stamps, if not underwritten to an amount exceeding that covered by the former ones. By 35 Geo. III. c. 63, § 13, the stamp laws do not extend "to prohibit the making of any alteration which may lawfully be made in the terms and conditions of any policy of insurance duly stamped, after the same shall have been underwritten, or to require any additional stamp-duty by reason of such alteration, so that such alteration be made before notice of the determination of the risk originally insured, and so that the thing insured shall remain termination of the risk originally insured, and so that the thing insured shall remain the property of the same persons, and so that such alteration shall not prolong the term insured beyond the period allowed by this act, and so that no additional or further sum shall be insured by means of such alteration." This clause is liberally further sum shall be insured by means of such alteration." This clause is liberally interpreted in the case of correction of mistakes, or improvement of definitions, provided the thing originally intended to be insured be not altered. An extension of the time of sailing, and a waiver of the warranty of sea-worthiness, do not require a new stamp, nor does the alteration of a voyage "from Stockholm to Swinemunde," to one from Stockholm "to Swinemunde," to one from Stockholm "to Swinemunde," to one isk "at and from Liverpool to Quebec," to one "from Liverpool to St John's, New Brunswick." But the terms of the original policy cannot be so altered by any memorandum as to bring it into a class requiring a higher duty, without affixing the stamp thereby required (Smith's Mercantile L., 302). The regulations for returning spoiled stamps will be found in 54 Geo. III. c. 133.

(Park on Insurance. Marshall on Insurance. Smith's Mercantile L., 268-334.)

For Insurance against Fire, the policy, after reciting the receipt of the premium, generally bears that the insurers "covenant and agree, from a day named,

and unto and inclusive of another day named, and so long as the insured continues to pay the premium, that the funds of the company shall be liable to make good any such loss as may happen by fire (except it be occasioned by any invasion, foreign enemy, civil commotion, or any military or usurped power)," to the property specified. The terms should express a covenant or agreement, such as may found a clear right of action against the parties, or those they represent, for an order or direction to pay merely founds an equitable claim. It is usual to introduce the scale of premiums applicable to the different risks by indorsement on the policy, referring to them so as to make them part of the contract. The policy must accomreferring to them so as to make them part of the contract. The policy must accurately describe the premises, and give the name of the insured. There is no such distinction as that of valued and open policies, the loss being in the usual case restricted, but not measured. An Average clause, however, is now not of uncommon occurrence, by which, when the property is of greater value than the amount insured, the insured recovers, in the case of a partial loss, a sum bearing that proportion to the loss, which the sum covered by the insurance bears to the value of the property. Thus, if the property be worth £1000, and the amount insured be £100, if a loss be caused to the extent of the £100, £10 only is recovered. By 9 Geo. IV.c. 13, § 1, where the insurance covers two detached buildings, or goods contained in detached buildings, so separated as to create a plurality of risks, a distinct sum must be insured upon each, with an exception in favour of implements and stock upon one farm. A policy of insurance is assignable at any time before a loss, to any one to whom the interest insured may have passed. The offices generally give notice upon the policy that "it shall be of no force if assigned, unless such assignment be allowed by an entry in the books of the office, or indorsed on the policy, and "even without this provision, upon the general principles of law, it is very questionable whether the holder could have any legal demand against the insurers without notice to them" (££15, 70). By 55 Geo. III. c. 184, the stamp-duty is 1s. for each policy, and 3s. a-year for every £100. Public hospitals, and (by 3 & 4 Wm. IV. c. 23, § 5) agricultural produce, farm-stocking, and implements of husbandry, are exempt. (££15 on Five and £16 Insurance). [Insurance, Risk.]

In Lipe Insurance, the policy generally bears that a certain sum is payable at a certain time after the death of the person insured, should he die within the year, or within any succeeding year in which he has duly paid the premium; on the precedent condition th referring to them so as to make them part of the contract. The policy must accurately describe the premises, and give the name of the insured. There is no such distinction as that of valued and open policies, the loss being in the usual case re-

resembles: the monntains are chiefly prolongations of the Astonya, Castillan, and Toledo chains, the whole running from N. E. to S. W., but throwing off nunscous branches; while again, the principal rivers,—as the Douro and the Tagus, flowing E., and the Guadiana S.,—are merely the terminations of Spanish streams. There are not jut we catesiare plains; one, the plant of Alentajo, E. of the Tagus, the other S. of the Douro; but there are numerous fertile valleys between they to the S. of Gap Roca; and some parts of Alentajo are so are due to be unimabitable, from the scarcity and badness of the water; yet there are abundance of rich tracts in other districts, to the scarcity and badness of the water; yet there are abundance of rich tracts in other districts, to the scarcity and badness of the water; yet there are abundance of rich tracts in other districts, to the scarcity and badness of the water is the scarcity and badness of the water is a state of the nobles and clergy, and the indosence of the people; have sunk the industrial arts in Portugal lower than in aimoust any other European state. The events connected with the late war ladd lower than in simple and the productions of the people; water the foundation of a new order of things; and a constitutional government has been established, by which feedal rights and monastic fastitutions have been abolished, an equal system of taxation-pliniment to have produced much effect on the wealth and habits of the people; want of capital solut, and crine, are yet conspicuous, especially in the central and counterp rovinces; and in most departments of industry and knowledge, this kingdom, to use the words of a recent travelier, forms of the same of the same of the same and makes; and on the low grounds, rice; while in the shelters of value of the same and makes; and on the low grounds, rice; while in the shelters of value provinces are all the productions of the same provinces. The investment of the production of the production of the same provinces are all the producti

practicable for vessels drawing more than 16 feet, is still well adapted for trade; in front of the town it is sufficiently deep for pretty large vessels, while brigs and annalier craft can lie close to the quay; and it is navigable by barges or boats for about 100 miles. Pop. 70,000. On the opposite side of the river, between the suburbs of Villa-nova and Gaya, there are immense vanits or "lodges," where the wine is kept. Port-wine is here the great staple, but the exports of fruit are also considerable. From 80,000 to 90,000 tons of shipping enter annually, of which fully one-fourth are British. Both Lisbon and Oporto have a regular steam communication with England.

The other ports are Caminha, Viano, Villa to Conde, Aveira, Figueira, Setubal or St Uhes, on the W. coast, and Paro and Villa Nova de Portimao in Algarve.

MEASURES, MONEY, FINANCES, &c.

The other ports are Caminfa, Viano, Villa do Conde, Aveira, Figueira, Setubal or St Ubes, on the W. coast, and Faro and Villa Nova de Portimon in Algarre.

Measures and Weights.—The palmo (createries) of 8 inches = 8 628 lims, inches; the per of cot = 15 palmo; the vara = 8 palmos = 4311 limp, inches; the covado, nominally qual 3 palmos, is commonly \$44 Portuguese inches, or \$767 limp, bracks, or Simp, miles of timongs.

The Portuguese league (18 to the degree) of 3 miles of \$768 limp, yards, or 3 imp, miles of timongs.

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POSTING, or travelling by means of hired horses, is a government monopoly in almost all European countries, except Britain, where it is conducted in a much superior manner, through the competition of private parties; though, owing to taxation, at greater expense. Posting is now, however, less common in this country than formerly, owing to the extension of other means of travelling. Duties in Britain.—Besides the carriage duty [Coach], every postmaster is required, by the act 2 & 3 Wm. IV. c. 130, to take out yearly a license costing 7s. 6d., and which expires 31st January. He must also pay 14d. per mile for each horse let for hire; but where the distance is not greater than 8 miles, then 1-8th of the charge for hire, or 1s. 3d., at his option; and in the case of the horse not bringing back any person, and not deviating from the usual road, 1s. In respect of every horse let or used for any time less than 39 days, 1-8th of the charge for hire; or in lieu thereof, for every day not exceeding 3 days, 2s. 6d.; from 3 to 13 days, 1s. 9d.; above 13 and less than 39 days, 1s. 3d. Posting carriages must be numbered, and bear the owner's name and residence. The duties are cheeked by means of telekets left by the hirer or postilion with the turppike keeps,—an account of which is taken periodically by the excise. The regulations are enforced under penalties. In 1841, the produce of the post horse duties are £196,134, and of the licenses, £2729.
POST-OFFICE. The origin of this institution may be traced to the special

POST-OFFICE. The origin of this institution may be traced to the special messengers or "nuncii," who, in ancient times and in the middle ages, were employed to convey the public despatches and edicts. At a later period regular couployed to convey the public despatches and edicts. At a later period regular couriers were employed, and stations or posts assigned, between which each should pass, handing the papers from the one to the other. In the fifteenth century, regular posts were established in different parts of Europe, the benefit of which was gradually extended to private parties; and public letter offices were opened in France in 1619, and in Britain in 1635. The latter, called a "merchant post," did not prosper; but, in 1649, it was placed on a better footing by the Commonwealth; and, in 1656, further improved by Cromwell. In 1710, a general post-office was established by the act 9 Anne, c. 11, for the United Kingdom and the colonies.

The post-office, however, continued long afterwards a very imperfect institution;

established by the act 9 Anne, c. 11, for the United Kingdom and the colonies.

The post-office, however, continued long afterwards a very imperfect institution; the mails were sent by boys on horseback,—a mode attended with delay, danger, and uncertainty; and local and cross-road posts were either still more defective, or altogether wanting. At length, the post having been outstripped, in point of despatch and safety, by the ordinary stage-coaches, it occurred to John Palmer, manager of the Bath theatre, that a great improvement might be made by contracting with the proprietors of coaches for the carriage of the mail, and binding them to perform the journey in a specified time, and take a guard for protection. His mail-coach plan was submitted, in 1762, to Mr Pitt, by whom it was zealously supported. In 1764, notwithstanding much opposition, it was carried into operation on the principal roads, Mr Palmer being, at same time, appointed comptroller-general of the post-office; and the system was thereafter gradually

extended, with other improvements in regard to frequent transmission, punctuality, and speed, to almost all parts of the kingdom.

The safe and speedy conveyance of letters for the benefit of trade, was the primary consideration with the British government on the first establishment of a post-office; the revenue was held to be of minor importance: this principle is recognised in the preamble of the different postage acts which were passed from the time of the Commonwealth down to the 9th of Queen Anne. In 1710, when Id. time of the Commonwealth down to the 9th of Queen Anne. In 1710, when 1d. was added to several of the previous rates, only 4d. was charged in Britain for distances above 80 miles, and 3d. for shorter distances; and, in 1765, the rates for distances not exceeding 30 miles, were reduced to 1d. and 2d. But, in 1784, on the introduction of Mr Palmer's plan, one object of which was an augmentation of revenue, the whole were graduated between 2d. and 6d.,—rates which, owing to the exigencies of the war, were successively increased in 1797, 1801, 1805, and 1812. In the year last mentioned, the charges on general post letters in Britain were,—for distances not above 15 miles, 4d.; from 15 to 20 miles, 5d.; from 20 to 30, 6d.; 30 to 50, 7d.; 50 to 80, 8d.; 80 to 120, 9d.; 120 to 170, 10d.; 170 to 230, 11d.; 230 to 300, 12d.; and an additional 1d. for each additional 100 miles. These rates were continued until 1839. A single letter was understood to contain a single piece of continued until 1839. A single letter was understood to contain a single piece of paper, not exceeding 1 oz. in weight; a second piece, or enclosure, constituted a double letter; beyond, fourfold,—the postages advanced by weight. In Scotland, an additional id. was charged for tolls. In Ireland, the rates were mostly lower. an additional jd. was charged for tolls. In Ireland, the rates were mostly lower. Between Britain and Ireland, packet rates were charged in addition to their respective inland rates. The post rate in towns was ld., except in the London district, where it was 2d. and 3d., according to distance. The exemptions from postage were, letters "franked" by members of parliament and certain official persons, a privilege coeval with the institution of the post-office; parliamentary papers; and stamped newspapers: the letters of soldiers and sailors, countersigned by their officer, were charged, after 1795, at a uniform rate of ld.

In 1709, the gross receipt of the post-office was £111,461, and the net revenue, £56,664. In 1779, the net revenue was only about £140,000. But after 1784, Mr Palmer's improvements, and the advance of the country, led to a rapid increase; and, in 1803, the gross receipt was £1,372,979, and net revenue, £956,212. In 1815, the gross receipt was £2,323,835; the charges, £704,639, or about 29 per cent. on

£1,619,196, the net revenue. After 1815, the excessive rates of postage, combined with the greater facilities for evading them afforded through improved means of communication, prevented any further augmentation of the revenue, notwithstanding the subsequent increase of the country in wealth and population.

The following tables, abridged from the Parliamentary Report on Post-office Reform, exhibit an estimate of the documents which passed through the office in 1837, the average postage thereon, and the revenue: also an analysis of the cost of management, as prepared for the said Report in 1838:—

RI	CEIPTS.			Charges.				
Description of Letters.	No. of Letters.	Av. Pos- tage.	Gross Revenue.	1. Cost of transit in U. Kingdom :—	£			
General post, inland,		d.	£	Mail-coach expenses	140,985 107,818			
above 4d	46,378,800	84	1,782,191		30,998			
Do. not above 4d	5,153,200		75,151					
London local post	11,837,852		114,753		7,506			
Provincial do	8,030,412	1	33,483		287,307			
	71,400,264	64	2.005.578	2. Cost of P. O. establishments in U. K.	288,078			
Packet and ship		931	369.340					
Parliamenty, franks	4,813,448			Foreign and colonial packets.				
Official franks	2,109,010		[£31,509; other foreign and colo-				
Statutes	77,542			nial charges, superannuation al-				
Newspapers	44.500,000			lowances, &c. £91,738	123,247			
Tionspapers								
**	196, 423,836	l	4 643	Total charges	A98,632			
Unappropriated	l	ŀ			1,680,927			
	l	l .	2,379,550		2,379,559			

In computing the average rates of postage now stated, multiple letters are included and counted as single; excluding multiple letters, the average postage of inland letters, instead of 6½d. was 6½d.

We have furnished these details from their bearing upon the plan of post-office reform brought forward in 1837 by Rowland Hill, a gentleman unconnected with the department. He proposed, 1st, a low and uniform rate, instead of the then existing high and variable rates; 2d, increased speed in delivery; and, 3d, more frequent despatch. He also recommended that the postage should be charged by weight, and prepaid, at the rate of 1d, for each letter not above ½ oz.; and he afterwards proposed that the prepayment should be by means of stamps, an expedient which he says was suggested to him by Mr Charles Knight. Mr Hill's plan embraced all inland letters, to the exclusion even of parliamentary and official franks, braced all inland letters, to the exclusion even of parliamentary and official franks, but it did not include foreign and colonial letters

The principle of a uniform postage is founded on the facts that the cost of distributing letters in the United Kingdom consists chiefly in the expenses incurred tributing letters in the United Kingdom consists chiefly in the expenses incurred with reference to their receipt at and delivery from the office; and that the cost of transit along the mail roads is comparatively unimportant, and determined rather by the number of letters carried than the distance. "It is not matter of inference," says Mr Hill, "but matter of fact, that the expense of the post-office is practically the same, whether a letter is going from London to Barnet (11 miles), or from London to Edinburgh (397 miles); the difference is not expressible in the smallest coin we have." The cost of transit from London to Edinburgh, he explained to be only 1-36th of a penny. The fixing of a low rate flowed almost necessarily from the adoption of a uniform rate; it was besides essential to a stoppage of the private conveyance of letters. The post-office was thus to be restored to its ancient footing of an institution whose primary object was public accommodation, not revenue: of an institution whose primary object was public accommodation, not revenue; though the loss of income from the change would, it was thought, be gradually diminished, and perhaps made up, by the increase of correspondence, commercial,

diminished, and perhaps made up, by the increase of correspondence, commercial, literary, and domestic, arising from the reduced postage.

A general feeling having been aroused in favour of Mr Hill's plan, it was remitted by the House of Commons to a committee for investigation, in December 1837. And in 1838, the committee reported, "that the evidence taken before them abundantly proves the present high rates of postage are extremely injurious to all classes;" restricting commerce, art, and science, and the progress of education; circumscribing the operations of institutions for the promotion of religion, morality, and charity: interfering with domestic comfort; suppressing almost entirely the and charity; interfering with domestic comfort; suppressing almost entirely the correspondence of the poor; and impairing habitual respect to the law by encouraging evasions of the post-office statutes. The committee, therefore, recommended increased facilities for correspondence. "Upon the important novelty of

a uniform rate, the committee are of opinion, that that part of the inland postage on letters which consists of tax ought to be the same on all: that as the cost of conveyance per letter depends more on the number of letters carried than on the distance which they are conveyed, the cost being frequently greater for distances of a few miles than for distances of hundreds of miles, the charge, if varied in proportion to the cost, ought to increase in the inverse ratio of the number of letters conveyed; but as it would be difficult, if not impossible, to carry such a regulation into practice, and as the actual cost of conveyance (assuming the charged letters to bear the whole expense of the franked letters and of the newspapers) forms less than the half of the whole charge, exclusive of tax, the remaining portion consisting chiefly in the charges attendant on their receipt at, and delivery from the post-office, the committee are of opinion that the nearest practicable approach to a fair system would be to charge a uniform rate of postage between one post-town and another, whatever may be their distance; and the committee are further of opinion, that such an arrangement is highly desirable, not only on account of its abstract fairness, but because it would tend in a great degree to simplify and economize the business of the post-office." Lastly, the committee reported in favour of the other parts of Mr Hill's plan, confirming by official data the whole of his conclusions. conclusions.

In 1839, the uniform penny-postage was adopted by parliament. A preparatory fourpenny rate for general post letters was introduced, December 5, 1839, and at same time the London district rates were reduced to ld.; the uniform penny rate came into operation on 10th January, and stamps on the 6th May 1840.

Besides these changes, considerable improvements have of late been effected in the

frequency, despatch, and speed of the mails,—the last being chiefly accomplished by the transmission of letters in all the chief routes in Britain by means of railways. The principal inland mails are sent from London (except on Sunday) twice a-day, nue principal miand mails are sent from London (except on Sunday) twice a-day, morning and evening, instead of only once, in the evening, as formerly; and Edinburgh and Glasgow are reached in 29 hours. A considerable addition has also been made to the number of post-offices in the United Kingdom, which at present exceed 3000. So that letters are now carried, at an expense convenient to the poorest, quickly and punctually into every part of the British islands.

The following table shows the financial movement of the post-office in the four years ended January 5, 1842:—

Jears on	ucu vano	a.	, ,,	1012		_									
Year to Jan. 5.			ie.	Cost of Manage- ment.		Net Revenue.		Postage charged			Net Produce, ex- clusive of Charges ontheGovernment Departments.				
1839 1840 1841	£ 2,346,278 2,390,763 1,342,604	0 10 5	d. 94 14 2	£ 686,768 756,999 858,677	3 7 0	d. 61 4 51	1,659,509 1,633,764	17 2 4	d. 23 91 82	£ 45,156 44,277 90,761	0 13 3	d. 11 4	£ 1,614,353 1,589,486 393,166	16 9 1	d. 34 54 64
1842	1,495,540	9	01	938,168	19	7	557,371	9	51	113,255	15	10	444,115	13	71

The net revenue is less than was anticipated by many, chiefly from the increase in the charges of management, a rise partly due to the additional expenses attendant on the conveyance of the mails since the extension of the railway system. Still, the results of the last year show the rate of the letter tax to be 59½ per cent. (the ratio of £557,371, the net revenue, to £938,168,* the cost of management), or 47½ per cent., if estimated by the net produce, exclusive of postage paid by government; and these rates are yearly increasing. The utility of the post-office, however, even as a source of revenue, is not to be appreciated solely by the amount which it yields directly to the state; it must also be viewed as auxiliary to other branches of the public income; and few can doubt the beneficial influence of Mr Hill's system upon all departments of industry, and almost every object of national policy.

upon all departments of industry, and almost every object of national policy.

The number of letters posted in the first four months of 1842 averaged about 3,130,000 a-week in England, 440,000 in Scotland, and 430,000 in Ireland; total, 4,000,000 weekly, or about 208,000,000 a-year; being 23 fold or 160 per cent. more than the number in 1838 (taken at 80,000,000), notwithstanding the great depression of trade in the interval. Mr Hill estimated the probable augmentation at 54 fold,

^{*} This does not include the charges of certain packets controlled by the Admiralty, to whose superintendence they were removed in 1837, and the expense of which is included in the Navy estimates, where they are not distinguished. On the other hand, were a strict accounting to be gone into, the post-office would fall to receive credit for the value of the stamps of newspapers distributed by it, which, taking their number at 44,500,000, as in 1837, would amount to £185,416.

or 420,000,000 letters a-year, but he did not specify the time; and some of the facilities recommended by him have not yet been carried into operation. A striking circumstance, illustrative of the nature and progress of the measure, noticed in a parliamentary return, is, that the gross revenue in England under the penny rate, in the month ending January 5, 1842, was £100,383; and in the same month in 1840, under the fourpenny rate, not more than £103,623,—an excess of only 34 per , notwithstanding the great difference in the rates.

cent., notwithstanding the great difference in the rates.

In many foreign countries the postage is fixed rather with a view to public accommodation than revenue. This is the case in France, where the charge is by weight; a quarter of an ounce, however, being only allowed for each single rate. In the United States, the post-office income was not until lately equal to the expenses. But the principle of a uniform rate can be applied with success only in a country such as Britain, where, besides high civilisation, there is great density of population, extraordinary facilities for internal communication, and immense as well as widely diffused commerce.

The communication with countries beyond see her been creatly alternal of late.

well as widely diffused commerce.

The communication with countries beyond sea has been greatly altered of late years by the general employment of steam mail-packets with all but very distant places. There is daily intercourse with France, and at frequent intervals with other parts of the Continent. In 1837, steamers were established between Bombay and Suez, and letters now reach London from India, by way of Egypt, in 35 days, and sometimes sconer. In 1839, mail steamers were also established between Liverpool and N. America, which accomplish the voyage to Halifax in 10 days, and Boston in 12 days; and in 1842 another line of steam-packets opened a more rapid communication between England and the W. Indies and S. America.

STATISTES AND REGISLATIONS.

extent abrogated by the acts 2 & 3 Vict. c. 59, and 3 & 4 Vict. c. 96, relating to the uniform penny postage.

The Charpe for inland letters, not exceeding is one in weight, is I postage; from is os. to I os. 2 postages; from I os. to I os. 2 postages; from I os. to I os. 3 postages; and so on, adding 2 postages for every os. up to I os. 6 postages in the second of postages in the second within 1 postage; and to open the property of the property of the kingdom must be possed within 2 days after the which must be prepaid either by money or the use of a stamp, or it will be charged double; and if the weight of the letter should exceed the value of the stamps stached, the excess will be charged double. Stamps entered on payment of a fee of is. Colonial, India, and United States letters, when not exceeding 2 os., are charged is a condition of the property of the postage in the money-order department. In Register, an intercolonial rate of 2d. being besides charged of those for British N. America, according to the route and distance. Letters according to the route and distance. Letters and the property of the average according to the route and distance. Letters according to the route and distance. Letters are commonly applied to an im-

The Post-office Acts, passed between 1710 and 837, were about 180 in number; but the greater part were repealed in the laster year, when the following statutes were passed for regulating the following statutes were passed for regulating the whole department, namely, the I Vict. c. 35, for the management of the post-office; c. 34, for the management of the post-office; c. 34, for the regulation of the duties; c. 35, as to franking; and c. 36, consolidating the laws relative to offences. These, again, have been to a great extent abrogated by the acts 2 & 3 Vict. c. 32, and 3 & 4 Vict. c. 96, relating to the uniform penny postage.

The Charge for inland letters, not exceeding a considerable of the state of the sta

according to the route and distance. Letters amount of each to have been £3, 2a.04d. S.
POTASH (Fr. Potasse. Ger. Pottasche), a term commonly applied to an impure carbonate of potash, obtained by the incineration of wood, lixiviating the ashes in barrels, first with cold and then with hot water, filtering the ley, and evaporating it to dryness in an iron pot. In this state, which is that of the potash of commerce, it still contains some vegetable matter not perfectly incinerated, to destroy which it is put into a crucible, and liquefied to an intense heat. The melted matter is then poured out on iron plates, where it hardens, and in this purer state it is called pearl ash.

Potashes occur in hard irregular masses or fragments, of a light blueish gray colour, somewhat caustic alkaline taste, inodorous, and very deliquescent. Pearl ashes are of a whitish colour and pearly lustre, and of considerably purer and finer texture and appearance than the other. These commodities are valued according to their purity, estimated generally by their easy solubility in water, two parts of

which, according to Mr Brande, should entirely and easily dissolve one part of pearl-ash without the aid of heat: the residue, if any, consists of impurities.

Ashes are used in the soap and glass manufactures, bleaching and scouring of linens and woollen cloths, and dyeing; also, when refined, in medicine, surgery, and other arts. But of late years their consumption has been checked by the substitution of soda and the chlorides of lime and soda for many purposes; and the importations into Britain, formerly upwards of 200,000 cwts., do not now exceed 120,000 cwts., which, excepting a small quantity from Russia, are wholly brought from N. America, chiefly Montreal. [Canada.]

POTATO (Fr. Patate. Ger. Kartoffel. Por. Batata. Sp. Patata), "the most precious gift of the New World to the Old," appears to have reached the Continent from Spanish America; though it is said to have been first brought to Britain from Virginia by Raleigh in 1586. It is, however, only within the last 100 years that its cultivation has become general. The plant (Solanum tuberosum), valued solely for its esculent tuberose roots, has a very wide range of soils and temperature; but dry, light ground is that best adapted for it. The varieties are usually distinguished into the early and the late; the former, except in the vicinity of large towns, raised into the early and the late; the former, except in the vicinity of large towns, raised chiefly in the garden, the latter in the fields: there are, however, intermediate kinds. All are commonly propagated from the tubers; those reared from seed taking several years before their roots obtain the full size. The sets are usually taking several years before their roots obtain the full size. The sets are usually planted in spring; from 8 to 10 cwts. are required to the acre; and the crop varies from about 5 to 10 tons, according to soil and culture. The roots are taken up in dry weather, when they are either stored or preserved in heaps or pits covered with earth, as a defence against frost, and to prevent putrefaction. Besides its ordinary use as human food, the potato is employed in rearing live-stock, and in distillation. Its fecula, wanting gluten, does not undergo the panary fermentation, but it may be so mixed with wheat-flour as to produce good bread, and it is applicable to other purposes of domestic economy, while the use of its starch is extending in various forms. It grows exempt from most of the hazards as to weather to which other crops are subject; and it is liable to few diseases: the most dreaded are the curl, an imperfect formation of the tubers, indicated by the curling of the leaf; and the dry-rot, or decay of the set; both unexplained. It can be cultivated on a small as well as a large scale; is under every system of agriculture a beneficial object; and produces more nutriment upon the same extent of ground than any other plant cultivated in the temperate regions. It may thus be regarded as the banana of the temperate zone. It now forms a great part of the food of the inhabbanana of the temperate zone. It now forms a great part of the food of the inhabitants of Europe; and its introduction as a supplementary crop has greatly lessened the hazards of famine. Mr Cobbett and others have asserted that its use in Irethe hazards of famine. Mr Cobbett and others have asserted that its use in Ireland, where it forms the principal article of food, has been attended with panperizing effects; but the same remark may be made upon the dependence of the flindeos upon rice. The entire reliance of the peasantry of Ireland and India upon the cheapest species of food is merely one of many indications that these fertile countries are in an unhealthy state of indigence. S

The import duty on potatoes, formerly 2s. per cwt., has been reduced (1842) to the nominal rates of 2d, per cwt. from foreign countries, and 1d, from the colonies. This change may perhaps lead to shipments to London from the adjoining parts of the Continent; but it is impossible that a cheap bulky article, raised every where with facility from the poorest soils, can become an important object of external commerce. POULTRY. The rearing of domestic fowls forms an important branch of rural economy among small farmers and cottagers, especially in the vicinity of large towns.

economy among small farmers and cottagers, especially in the vicinity of large towns. In Surrey, Sussex, Essex, Cambridge, Norfolk, Suffolk, and Berkshire, however, the rearing and fattening of poultry for the London market is thought worthy of attention by considerable farmers. At Wokingham, in Berkshire, the metrothe rearing and fattening of poultry for the London market is thought worthy of attention by considerable farmers. At Wokingham, in Berkshire, the metropolitan dealers sometimes pay £150 to the feeders in that neighbourhood in a single market-day. Reigate and Dorking are also large poultry markets. The present Earl Spencer, some years ago, instituted a poultry show at Chapel Brampton, in Northamptonshire. As it is always desirable to have a standard in view, raised as high as the most approved system will carry it, we give the weight of the fowls which gained the prizes awarded in 1829:—The best turkey weighed 20 lbs. 4 oz.; capon, 7 lbs. 14½ oz.; pullet, 6 lbs. 3½ oz.; goose, 18 lbs. 2½ oz.; cauple of ducks, 15 lbs. 10 oz. The production of animal food by domestic fowls is much greater than is commonly imagined. Mr Lawrence, in his treatise on poultry, states, that from five Poland hens he obtained, in 11 months, 503 eggs, weighing, at the average of 1 oz. 5 drams each, 50½ lbs. The feathers of domestic fowls form an object of considerable trade, especially between Ireland and England. B POUNCE. [CUTTLE-FISH. SANDARACH.]

POUND, the integer of weight in most European countries, seems originally to have been derived from the Roman pondus, or libra of 12 uncise, though the latter was less than most of the pounds now in use, being, according to Paucton, only 5174 troy grains. In the middle ages, the weights were rude and variable. It was one of the concessions by King John in the Magna Charta, that there should was one of the concessions by King John in the Magna Charta, that there should be uniformity in this respect; and not long afterwards a statute, 51 Henry III., ordained that an English penny, called the sterling, should weigh 32 dry wheat grains, that 20 pence should make an ounce, and 12 ounces a pound. At a later period, the number of grains in the penny was reduced to 24, making 5760 grains in the standard pound; which, under the name of Troy weight, was first used at the Mint in 1526, instead of the ancient Moneyer's or Tower pound of 5400 grains. The Troy pound has ever since been the English standard, though its use has been confined to the precious metals; the avoirdupois pound of 7000 troy grains having been for several centuries that generally used in commerce. [Coin. Measures.]

MEASURE.]
POUND (Lat. & Sp. Libra. It. Lira. Fr. Livrs), the ancient money integer in most parts of Europe, was at first a pound weight of allver, from which 20 shillings were coined, or 240 pence. This mode of reckoning, supposed to be of Roman origin, was introduced into modern Europe by Charlemagne, who divided the livre into 20 sous, and each sou into 12 deniers. It was established by William the Conqueror in England, where it has been continued down to the present time, though in almost every other part of Europe it is now superseded by the decimal system. [Conn. Montr.]

DREMIUM (Lat Promises, reward), is instly defined by Dr Johnson to be

unough in aimoss every other part of Europe it is now superseded by the decimal system. [Coin. Money.]

PREMIUM (Lat. Promium, reward), is justly defined by Dr Johnson to be "semething given to invite a loan or a bargain." In commerce, however, the term is not used very consistently. Thus, while the premium on the share of a joint-stock company is understood to be the sum given for it above its original value or par, the premium of an insurance is the whole consideration granted by the party protected under the contract.

PRESCRIPTION in Scotland is applicated in the coarse in which limitation is

PRESCRIPTION, in Scotland, is employed in the sense in which limitation is used in England, viz to express that operation of the lapse of time by which obligations are extinguished or titles protected. There are various kinds of pre-

scription.

The long prescription, as it is termed, viz. the lapse of 40 years, sweeps away all unimplemented obligations. (Act 1617, c. 12.)

The vicennial or twenty years' prescription protects parties from action on obligations holograph, or in the handwriting of the granter, unattested, and on books of accounts. But the verity of the document may be referred to the writer's

books of accounts. But the verity of the document may be referred to the writer soath. (Act 1669, c. 9.)

The septemaial prescription relieves cautioners after the lapse of seven years from the date of their undertaking. If the cautioner appear on the bond as a principal, he has the benefit of the act only if there be a clause of relief in the bond, or a bond of relief inimated to the creditor. (Act 1695, c. 5.)

The sexennial prescription protects parties from action on bills of exchange and promissory notes, after the lapse of six years from the day of payment. Banknotes and post-bills are excepted. Though the document is thus rendered unavailing, the original debt may still be proved by the writ or oath of the debtor. (12 Geo.

notes and post-bills are excepted. Though the document is thus rendered unavailing, the original debt may still be proved by the writ or oath of the debtor. (12 Geo. III. c. 72, § 38-41; 23 Geo. III. c. 18, § 55.)

The quanquennial or five years' prescription precludes action on bargains as to sale, letting, and hiring, and such like contracts as to moveables not constituted by writing. (Act 1669, c. 9.)

The trinnial or three years' prescription applies to tradesmen's accounts and servants' and artificers' wages, and has been stretched to include professional remuneration and the salaries of persons acting as mandatories or agents. In the case of salary or wages the amount due at each term runs a separate prescription. In the case of accounts, the prescription runs from the last article of the account. The presumption on which it proceeds is, that the debt has been paid within the three years; but the crediter retains his right, if he prove by the oath of the debtor, or by a document under his hand, that the debt is unpaid. (Act 1579, c. 83.) 1579, c. 83.)
PRESENTMENT, in the Law of Bills of Exchange. It is incumbent on the

holder of a bill to present it in certain cases for acceptance alone, and in all cases for payment, or for acceptance and payment together. It is necessary that hills payable a certain period after sight be presented for acceptance, that the point from which

the time runs may be fixed. In other cases it is not necessary to present for acceptance until the final presentment for payment; but it is in all cases prudent, as, ceptance until the final presentment for payment; but it is in all cases prudent, as, on acceptance, the paper acquires superior negotiability, and, on dishonour, the drawer and indorser become immediately liable. The only rule as to the time of presenting bills, payable at a certain time after sight, is, that it must be "within a reasonable time." Of this "reasonable time" no better account can be given drawer and indorser become immediately liable. The only rule as to the time of presenting bills, payable at a certain time after sight, is, that it must be "within a reasonable time." Of this "reasonable time." no better account can be given than that the law sanctions what is established by the usage of trade in each class of cases. Presentment for acceptance should be made at the place of shode of the drawee, or, if he be a man of business, at his place of business. It is the duty of the holder to use every reasonable means to discover the drawee, if he has left his prior residence or is otherwise difficult of access. The bankruptoy of the drawee is not notice of dishonour, and cannot excuse want of presentment. If a bill has been presented for acceptance, and dishonoured, and the dishonour notified, the holder is not required to present again for payment to preserve his recourse. If an acceptance is qualified, as by naming a place of payment, the qualification must be attended to in the presentment for payment. By 1 & 2 Geo. IV. c. 78, if we accept a bill "payable at the house of a banker or other place, without further expression in his acceptance, such acceptance of such bill; but if the acceptance hall, in his acceptance, express that he acceptance of such bill; but if the acceptor shall, in his acceptance, express that he accepts the bill, payable at a banker's house or other place." It is to be observed that this statute refers merely to the responsibility of the acceptor; with regard to that of the drawer and indorser, it has been decided, after much discussion, that a bill must be presented wherever it is accepted payable, to secure recourse (Gibb c. Mather, 1832; 2 Crom. & Jerv. 254). Where a place of payment is inserted in the body of the bill, it must be there presented, to preserve recourse of any portion on the ground of untimely hours, to show that there was an authorized person on the spround of untimely hours, to show that there was an authorized person on the spround of untimely for labour an

The cost of production, however, though in ordinary circumstances, and for any The cost of production, however, though in ordinary circumstances, and for any moderate period, nearly stationary, is yet by no means fixed. The invention of new processes, improvements in skill and machinery, discovery of readier sources of supply, and diminution of expense of transportation, all operate by insensible degrees in lowering the cost of many articles; while an opposite effect will be produced by all those circumstances which cause an increase in the labour of procuring them. In general, it has been observed that there is a natural tendency in objects of manufacture to diminution of cost: the rudest machinery is of course first expolated; by progressive improvements to which no limit can be assigned it employed; by progressive improvements, to which no limit can be assigned, it is rendered more and more capable of yielding a greater quantity with the same expense; and the competition of capitalists invariably reduces the price of every commodity to the sum which the least expensive method necessarily requires for

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its production. But in agriculture, on the contrary, the natural tendency is to increased cost; there the finest machinery, that is the best soils, are first used; and recourse is afterwards had to inferior soils, requiring greater labour to produce the same supplies. Improvements in cultivation are only a temporary check to this progression; for the stimulus which they at the same time communicate to population, and the natural tendency of mankind to increase beyond the means of subsistence, is ultimately certain, by forcing recourse to poorer lands, to raise prices.

These principles are generally applicable to all commodities which can be obtained in indefinite quantities; a class forming the great bulk of these which are objects of commerce. But sometimes particular accidents, sometimes natural causes, and sometimes legislative regulations, keep the market price of many commodities a good deal above the real cost. Thus, choice wines produced only in limited quantities by certain vineyards, curiosities, antiques, and some minerals, possess from their rarity a value altogether independent of the cost of production. Again, the possessors of "secrets in manufactures," of patents for inventions, or of trading monopolies, may, by keeping the market constantly understocked, by

possess from their rarity a value altogether independent of the cost of production. Again, the possessors of "secrets in manufactures," of patents for inventions, or of trading monopolies, may, by keeping the market constantly understocked, by never fully supplying the effectual demand, sell their respective commodities much above the natural price, and raise their emoluments, whether they consist of wages or profit, greatly beyond the natural rate. And the exclusive privileges of corporations, statutes of apprenticeship, and all those laws which restrain in particular employments the competition to a smaller number than might otherwise go into them, have the same tendency, though in a less degree.

"The price of monopoly," Adam Smith remarks, "is upon every occasion the highest that can be got. The natural price, or the price of free competition, on the contrary, is the lowest which can be taken, not upon every occasion indeed, but for any considerable time together" (Wealth of Nations, b. i. o. 7). But neither the difference between the two, nor the fluctuations in price of freely produced articles, occasioned by derangements in the balance of supply and demand, are uniform in degree with the quantities brought to or withheld from market. Thus, if double the usual quantity of goods is brought to market, it does not necessarily follow that the price will fall one-half, or that if only one-half the usual quantity is supplied, the price will be raised twofold. The proportional differences of price will in some commodities be less, in others greater; depending chieffy upon whether the article is a luxury or a necessary, of a durable or perishable nature, portable or bulky, of partial or general use, readily or not readily supplied by others; and according to the degree in which these and other qualities are combined. An excess in the importation of timber; while, again, the fall of price, than the same excess in the importation of timber; while, again, the fall of price on the latter will be greater than in the c can be easily re-exported.

But there is no commodity upon which the effect of quantity on price is so considerable as corn. In the case of a deficient crop, the struggle of every one to get his accustomed share of that which is necessary for his subsistence, and of which his accustomed share of that which is necessary for his subsistence, and of which there is not enough, or so much as usual, for all, produces an advance in price very much beyond the degree of the deficiency. Gregory King estimated that a defect of one-tenth in the harvest raised the price three-tenths above the common rate, that a defect of two-tenths produced a rise of eight-tenths, and so on. But though no such strict rule can be deduced, Mr Tooke thinks "there is some ground for supposing that the estimate is not very wide of the truth, from observation of the repeated occurrence of the fact, that the price of corn in this country has risen from 100 to 200 per cent. and upwards, when the utmost computed deficiency of the crops has not been more than between one-sixth and one-third below an average, and when that deficiency has been relieved by foreign supplies." The effect of abundance in depressing the price is not calculated to be in the same ratio as that of deficiency, as a portion of the excess may be held over. Still, "as a general position," says Mr Tooke, "it may be easeful laid down that an excess of the supply of corn is attended with a fall of price much beyond the ratio of excess; and that the larger quantity consequently will yield a less sum of money than the smaller quantity." (History of Prices, vol. i. p. 11-20.)

Yet the general tendency of the mutual competition of buyers and sellers in all mercantile communities is to preserve both price and quantity from great and sudden fluctuations. Thus, when supply exceeds demand, and the price of a commodity is lowered, individuals are always to be found ready to employ their funds.

and credit in purchasing a portion of the surplus, with the view of retaining it and realizing a profit when the altered relation of supply to demand shall have led to an enhancement of price; which, again, is through this operation rendered less excessive than it would otherwise become. The regularity and utility of this equalizing process in the corn-trade has been already noticed. [CORM.] It sometimes happens, however, that speculations, instead of limiting the vibrations of price product them to wider extrames. This is of price, render them more irregular, and force them to wider extremes. This is generally produced through miscalculation, acted upon by a loose and expansive system of credit, under the influence of which many are encouraged to leave their system of credit, under the influence of which many are encouraged to leave their own track and compete with the proper dealers in a commodity as speculative purchasers of it. The excitement then produced too often changes the sober industry of the merchant into the feverish ardour of the gambler; means are strained and responsibilities stretched in effecting purchases, until prices having reached an extravagant height, a general attempt is made to realize the golden dream by selling. A recoil then takes place, the whole illusion is dissipated, and, in a market glutted with the stocks of the needy or ruined speculators, the fall of price becomes as excessive as its previous elevation. Occasional over-speculation, and indeed overtrading of every kind, are inseparable from the existence of credit; but their frequency and extent will, doubtless, be lessened by the advancement and diffusion of commercial knowledge; even now, their effects would be greatly modidiffusion of commercial knowledge; even now, their effects would be greatly modified were it more generally kept in view that almost every kind of business is in the hands of established traders, too vigilant to overlook any opportunity of emolument, and who have much better means of information than temporary in-

terlopers.

Alterations in the Value of the Currency have only a nominal influence on prices. Alterations in the Value of the Currency have only a nominal influence on prices. If by the paring or abrasion of the coin, or an excessive issue of paper, the value of money is depreciated to the extent of one-half, two pounds, two dollars, or whatever may be the integer of account, will be required to be given where one was before sufficient; but this will not change the relative value of one commodity to another, as all will be affected by the depreciation in the like degree; and a bale of cotton, hogshead of sugar, and bushel of corn, will continue to preserve the same exchangeable ratio to each other. The alteration takes longer to reach some commodities than others, so as to occasion a rise in their price. But in the general case, a depreciation of the currency, in reference to particular things only, cannot be supposed, any more than a rise of the tide in reference to particular objects on the shore, and not to all. Similar observations are applicable to the fall of prices consequent on raising the metallic standard, or contracting the paper issues. It is consequent on raising the metallic standard, or contracting the paper issues. It is obvious, however, that though alterations in the currency do not affect the proportional value of one commodity towards another, they must produce injustice in reference to all existing contracts; defrauding the creditor in the case of a depreciation, and the debtor in the case of an enhancement of its value. [Assignats. MONEY.

Money.]

A sudden increase of bank accommodation, it may be observed, tends to raise prices by augmenting the number and power of purchasers, and thus stimulating their competition; while an opposite effect will be produced by the contraction of such accommodation. But disturbing influences of this kind, though often confounded with expansions and contractions of the currency, are in truth rather the action of capital; and their effects upon prices are principally confined to particular localities or branches of business. So long as paper-money can be converted into specie of the mintage standard on demand, any expansion or contraction which would reduce or enhance the value of our currency, compared with that of other countries, would be speedily corrected by the operation of the foreign exchange. Some alteration would of course be produced before the remedial process could be accomplished, but its effect upon prices in general would be scarcely appreciable. PRICE-CURRENT, a list showing the market prices of commodities.

PRIMAGE, a petty allowance on the freight or cargo of a ship, forming a perquisite of the master.

PRINCE EDWARD ISLAND, a province of British America, is situated in the S. of the Gulf of St Lawrence. Area, 2157 square miles. Population 40,000, chiefly of Scotch origin. The constitution, like that of the adjoining colonies, comprehends a lieutenant-governor, council of nine members, and house of assembly

of eighteen. S

The island, crescent-shaped, deeply indented by bays and inlets, and having an undulating surface, is rather fertile, with a climate resembling, but superior to, that of Lower Canada and Nova Scotia. The chief object of industry is agriculture, on which of late years considerable improvements have been effected; and a surplus of corn, potatoes, and cattle. are now reared for the supply of

Newfoundland, Nova Scotia, and New Brunswick; from whence British and foreign manufactures, spirits, tea, sugar, and other articles, are imported in exchange. The exports to Britain are confined to a small quantity of timber. Shipbuilding is pursued to some extent; but fishing has never risen into importance. In 1835, the total imports amounted to £61,185; whereof N. American colonies, £59,290; Britain, £10,191; Br. W. Indies, £621; foreign countries, £52: And the exports to £47,218; of which, N. American colonies, £38,293; Britain, £23; Lyreign countries, £503; Br. W. Indies, £58. In 1837, the shipping inwards amounted to 581 vessels, 23,578 tons; outwards, 436 vessels, 29,615 tons. The difference between these numbers is occasioned by the departure of new vessels, and the return of others in ballast, of which no account is taken. Charlottstown, the seat of government and chief port, is situated in Hillsborough Bay; it possesses a good harbour.

Charlotterwin, and the state of the color of the colorial currency is nominally what is called Halifax currency [Canada]; but the exchange on London is commonly about 39 per cent. The revenue in 1836 amounted to £11,513; and the ex-

PRINCIPAL AND AGENT.—An agent, in the widest acceptation, means a person employed to transact any description of business for another, the person so employing him being termed the "Principal." An attorney employed to transact law-business, is called his employer's agent. There are several commercial persons, whose duties and rights are in most instances explained under separate heads, who possess more or less of the character of agency, such as factors, brokers, superintendents of works, confidential clerks or managers, shipmasters, bank-officers, holders of del oreders commissions, and commercial agents.

tendents of works, confidential clerks or managers, shipmasters, bank-officers, holders of del oreders commissions, and commercial agents.

Constitution of the Contract.—An agent may be constituted by direct writing, or his authority may be implied from his situation. In some cases the former description of appointment is necessary. In England, a corporation cannot appoint an agent otherwise than by its common seal, except for inferior duties, or to do acte in the ordinary routine of the business of the corporation. To enable an agent to bind his principal by a deed under seal, he must be appointed by a similar deed. There are certain transactions as to real property, as enumerated in the Statute of Frauds (Ch.II.c.3, §§1,2,5), which by that act cannot be performed by an agent unless he hold authority in writing. There are other contracts for which the Statute of Frauds enforces writing by the party or his agent, but for which the statute of the agent does not require to be in writing. Authority to accept, draw, and indorse bills per procuration, may be given verbally. [BILL OF EXCHANGE.] Commercial agents receive the most ample and important powers by simple letter, which may either be general, authorizing them to conduct a particular line of business, and to perform the train of transactions connected with it; or specific, and applicable only to some named transaction; as, where a merchant employs a commission-agent to sell or purchase a particular lot of goods. Implied agency arises from the position of the parties; a slight circumstance will resolve the contract of master and servant into that of principal and agent, in as far as respects third parties. If the master have allowed his servant to buy for him on credit, he is answerable for what the servant was permitted to enter on, and if the dealer was not warned of the want of authority in the particular case. Other limited authorities may likewise be extended by implication. "Thus, a broker employed to purchase, has no authority, as broker merely, to sell cognition of such a course. In all cases, the extent of the sanction will be for the consideration of a jury. The implied agency may continue after the parties have ceased to have conn xion with each other, unless there is notice of the change, or ceased to have come that each owner, among the time which has intervened since previous transactions. Strangers are not entitled to infer without inquiry that the connexion continues. Where a perfrom the time which has intervened since previous transactions. Strangers are not entitled to infer without inquiry that the connexion continues. Where a person authorized to draw bills was dismissed, it was ruled "that if he draw a bill in so little a time that the world cannot take notice of his being out of service; or if he were a long time out of service, but that kept so secret that the world cannot take notice of it; the bill in those cases shall bind the master" (Harrison, 12 Mod. 346). An act done in the way of agency by one not duly authorized, will be confirmed by any act of assent on the part of him for whom he acts.

Authority of Agent.—Where the authority of the agent is limited, he cannot bind his principal beyond it; but authority may be enlarged as well as created by implication, as above. Authority to do particular acts is held to include the power of using the necessary means of accomplishing them. Thus, an authority to sue

for, receive, and recover a debt, includes an authority to arrest the debtor; and a broker employed to effect a policy may adjust the loss, and refer it to arbitration; but authority to collect, discharge, and compound debts, does not authorize the agent to negotiate bills received in payment. In pursuance of an old doctrine of the civilians, that a delegate cannot delegate his authority, an agent cannot depute his duty to another, unless specially empowered to do so. Written instructions receive a strict interpretation, but they are viewed through the medium of the usages of trade and the necessity of the case. Thus, where one left in Britain a letter of attorney, containing extensive powers to buy and sell, and do "all and singular such further and other acts, deeds, matters, and things, as should be requisite, expedient, and advisable to be done," with special power to "indorse, negotiate, and discount, or acquit and discharge the bills of exchange, promisery notes, or other negotiable securities, which were or should be payable to hisa, and should need and require his indorsement," it was held not sufficient to authorize the raising of money by acceptances; nor in the same case was another power by which the granter authorized his agent, "for him and en his behalf, to pay and accept such bills of exchange as should be drawn or charged on him by his agests or correspondents as occasion should require," of avail as to the acceptance of a bill which had not been drawn by one who was his agent to that effect (Attwood e. Munnings, 7 B. & C. 278). But on the other hand, where an agent was employed to proceed with and complete extensive mining operations abroad, implying a large and not easily pre-defined outlay of capital, he was found entitled to raise money by drafts after having exhausted a letter of credit (Duncarry e. Gill; 1 M. & M. 450). The agent's authority as respects third parties is measured by the duties he has to perform certain acts which are understood in ordinary practice to accompany his duties. where the agent is doing that which is not a part of the duties of his situation in a commercial sense, those who deal with him must examine his powers, and the principal is not answerable if he exceed them. The distinction has been thus stated in regard to the sale of a horse:—" If a person keeping livery stables, intrust his servant with a horse to sell, and direct him not to warrant, and the servant did nevertheless warrant him, still the master will be liable on the warranty, because the servant was acting within the general scope of his authority, and the public cannot be supposed cognizant of any private conversation between the master and the servant: but if the owner of a horse send a stranger to a fair with express divertimes and to suppose the horse, and the latter act contrary to the orders, the purthe servant: out it the owner of a noise send a stranger to a tail with express awestions not to warrant the horse, and the latter act contrary to the orders, the purchaser can only have recourse to the person who actually sold the horse, and the owner is not liable on the warranty." (Opinion in Venn v. Harrison. Paley, 203.) Agent's Obligations.—The first duty of an agent is to follow his instructions, and where he has received none, this duty resolves itself into an adherence to the proper where he has received none, this duty resolves itself into an adherence to the proper practices of trade in the capacity in which he is employed. Every breach of his authority is at the agent's own peril, though done with the intention of benefiting his principal. If it be unsuccessful, he is responsible; if it be successful, the advantage is reaped by his employer. But if the principal take the benefit of an act transgressing his instructions, he adopts it, and exonerates the agent. The latter is bound to exert all care and diligence in the execution of his trust, and to use all is bound to exert all care and unigence in the execution of his trues, and we are an means consistent with honesty for benefiting his employer. He is not, however, bound to sacrifice his own interest in paying that minute attention to the affairs of his employer which may gain for him petty advantages at larger sacrifices of his own. The usual definition of what is expected of him is, that he shall treat his employer's affairs as if they were his own, and do corresponding justice to them according to their importance. It would not, however, relieve an agent from the

consequences of neglecting the affairs of his principal, to prove that he had been equally careless of his own; the diligence required of him is that which a prudent man takes in his own affairs. [Bailmert.] If an agent undertakes a task requiring skill and experience, he is responsible for possessing the requisite amount of these qualities. An agent cannot be bound to perpetrate a fraud for his employer,—thus, where an agent employed to sell by auction, was privately instructed not to sell under a certain sum, and in breach of the instruction, but in obedience to law, sold to the highest bidder, he was found not responsible (Bexwell e. Christie. Coup. 395). It would have been otherwise had the instruction been to set up at a certain price. In selling, an agent should, if not instructed, obtain the best price which can be got. Unless he hold a dei oveleve commission (which see), he is not responsible for the credit of the purchaser. If he knows of the insolvency of the purchaser, he becomes his bis if he nevertheless give credit; and it as agent, selling to a person notoriously in discredit, gives credit on the part of his principal, but takes ready money in his own personal dealings, the presumption against him will be very strong. In purchasing, if the agent deviate in price, quality, or kind, from his instructions, the purchase must go to his own account, unless his employer adopt it; and it is said that if the principal has advanced money on the goods, he may dispose of them as if he were agent for the agent, if he be at such a distance that they cannot easily and safely be restored. But the principal must make his election speedily, for he will not be entitled after delay to return the goods upon the agent's hands. An agent ought not to place himself the purchaser, nor can one employed to purchase be the seller. An agent employed to purchase, cannot buy goods at wholesale, and take the retail profits, though he show that his employer pays no more than he would have done had he employed another person. "It, delay. It is said that if an agent has received only part of the price, he cannot be pursued for the money until the transaction is closed, unless the defalcation be owing to his own fault, as he cannot have recourse to several actions where there is but one cause of action (Varden v. Parker, § 8. Espinasse, 710); but the doctrine must be modified by circumstances connected with the probability of the purchaser making farther payments. If the agent take credit for the price in account with the purchaser, he is precluded from pleading that he has not received it. The agent is responsible for the money which he receives, but he is not so for its being absolutely realized to his constituent, if he have taken the proper and customary method of making it over to him. If it is customary in the profession to purchase the bills of persons apparently in good credit, or to lodge the money in a bank, and if, on either of these plans being adopted, the maker of the bill or the banker fail, the agent will not have to make good the loss. If an agent, however, place the money so paid him in a bank, without any mark to show that it is his constituent's and not his own, and the bank fail, he will be responsible, because he cannot be permitted to pitch upon any sum of meney lodged in his own name, as the money of his constituent, when the person responsible for it has failed. It is an agent's duty to keep clear accounts of his transactions for his employers, making them carefully distinct from his own. "Where an agent had for many years neglected to keep accounts, and had withheld part of his principal's money, an injunction was granted to restrain the transfer of the whole of certain stock discovered to have been invested in his own name, till he should distinguish on eath how much of it was bought with the money of his principal "(Paley, 48). But where a considerable time has elapsed, the natural presumption (if there be nothing to contradict it) will be, that an account has been demanded and rendered. Agents must hold any int

The Agent's Rights.—The agent is in the general case entitled to commission or remuneration for his exertions. This is either ordinary or del oreders; and where none is stipulated, the usage of trade will fix the amount. It is said that "if there be no contract, express or implied, and no usage, of ceurse no commission can be received" (Lloyd's Paley, 101). Where a person performed services for a committee, under a resolution entered into by them, "that any service to be rendered by him should be taken into consideration, and such remuneration be made as should be deemed right," no action lay, as the resolution was held to import that the committee were arbitrers in the master. By 12 Anne, st. 2, c. 16, 52, the commission for any broker or solicitor procuring a loan is limited to 5s. per £100; and by 17 Geo. III. c. 26, the commission for procuring a loan mupon annuity is restricted to 10s. per £100. Where a solicitor lends his own money, he is held not entitled to commission; nor has an agent any claim for commission on an illegal consideration. In other words, if, in stating the services for which he demands remuneration, he has to state the performance of an illegal act, he will not be remunerated, though his principal may have got the benefit of it. Thus, where a person holding an office in the customs, employed was not allowed to recover the reward (Stackpole c. Earl, 2 Wits. 133). But unless the illegality be clear on the face of the transaction, the employer will not relieve himself by proving that illegal acts were covenanted to be performed in connexion with it. Commission may be forfeited as damages for mismanagement. Besides their commission, agents are entitled to be repaid the disbursements proper to the precornance of the duties confided to them, and especially those necessary for the precornance of the principal with the premium "(Paley, 108). What payments of a cargo on account of the latences of the season, or other good cause, h

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Principal's Responsibility to Third Parties.—In enforcing any contract entered into by his agent, the principal is subject to any objections arising from the conduct of the agent, in the same manner as if he had acted similarly for himself. When an agent deals as if he were a principal, a purchaser is entitled to set off the price of a purchase against a debt due to himself by the agent. Where a purchaser is not aware of the merely representative character of the agent, he is safe in paying to him as a principal. Where the agent holds a del credere commission, the purchaser may pay him, though he have received notice to the contrary from the employer; and where the agent has a lien on a balance, the price amounting to such balance may be paid him. The claims of the principal against third parties in such cases will depend upon the nature of the agency, and on how much room there may be for the presumption that the agent is acting for himself. In this respect a factor, who has goods in his possession, and may appear to be the absolute owner, is in a different situation from a broker who is not intrusted with possession. The principal has action against third parties who have wrongfully absolute owner, is in a different situation from a broker who is not intrusted with possession. The principal has action against third parties who have wrongfully come into possession of his property through the agent's fraud or mistake; it would appear that in the former case he is entitled to recover when the circumstances are such that, if the mistake had been committed by himself, he would recover, and in the latter only against a participator in the fraud. The properly authorized acts of the agent, between the principal and third parties, are in the eye of the law the acts of the former. Delivery to the agent is delivery to the principal, and bars stoppage in transitus (which see); but a person who has charge of the goods for the mere purpose of facilitating their conveyance from place to place, is not an agent to this effect (See Paley on Principal and Agent, from which this article is in great measure abridged). [Broker. Del Cerdere. Factor.]

PRIVATEER. [LETTER OF MARQUE.]
PROMISSORY NOTE, is a written engagement by one party to pay money to another at some certain time, fixed or ascertainable. Promissory notes bear so close an analogy to bills, both in the nature of the document and its privileges and requisites, that the law regarding both is generally treated under one head. In referring for information to the article Bill of Exchange, it will be necessary to recollect these distinctions,—that in the case of a note there is no party subsidiarily liable as drawer; that the document is a simple obligation between two parties, the one engaging to pay the other: that there is no room for the necliminary obligations. one engaging to pay the other; that there is no room for the preliminary obligations of presentment for acceptance, or notice of non-acceptance; and that there is no disof presentment for acceptance, or notice of non-acceptance; and that there is no discountable document created upon the credit of the payee, previously to the obligation of the payer, who, in a promissory note, is generally denominated the maker. The document does not admit of the same breadth of application, nor consequently require so extensive a legal machinery for giving it efficacy. There is no room for the distinction between foreign and inland with regard to promissory notes; but the payee in a promissory note may put himself in the position of a drawer by indorsement, and then the document becomes, like a bill, an instrument which has value on the credit of some party besides the original debtor. The privileges of bills were conferred on promissory notes by statute;—in England, by 3 & 4 Anne, c. 9, § 1; in Scotland, by 12 Geo. III. c. 72, § 36; and in Ireland, by the Irish statute, & Anne, c. 11, § 8. Promissory notes made abroad may be negotiated in Great Britain if duly stamped (48 Geo. III. c. 149, § 21). [BILL OF EXCHANGE. INDOSEMENT. PROTEST, &c.]

OFFICIAL IN COLUMN 1 IN COLUMN 111. C. 143, § 21). [DILL OF ELECTRICAL INDORSEMENT. PROTEST, &c.]

PROOF IN BANKRUPTCY is the technical expression applied in England to the sanction of a claimed dividend. Creditors may prove their debts at the meetings appointed by the commissioners after adjudication, and at other meetings meetings appointed by the commissioners after adjudication, and at other meetings appointed for the purpose. Creditors may make affidavit on their own oath, and corporations on that of their agents. By the late act (5 & 6 Vict. c. 122), affidavits are to be made in England before the Court of Review, or either Subdivision Court, or a Commissioner, or the Master or a Registrar or Deputy Registrar of the Bankruptoy Court, or a Master in Chancery; in Sootland or Ireland, before a magistrate; and abroad, before a magistrate (a notary attesting) or before a British minister or consul (§ 67). Besides the affidavit, the commissioners are empowered "to require such further proof, and to examine such other persons in relation thereto, as they shall think fit " (6 Geo. IV. § 46). There are minute provisions in the 1 & 2 Wm. IV. c. 30, for the judicial settlement of disputed claims.

The petitioning creditor must prove like the others; his deposition at the opening not entitling him either to vote or draw a dividend. Where the assignees, or two or more creditors who have proved to the extent of £90, conceive

where the samplees, or two or more creations who have proved to the extent of £30, conceive a debt improperly proved, they may make representation to the commissioners, who, on examination of the creditor, when duly summoned, do not appear,—may expunge the proof (6 Geo. 1V. § 60). The jurisdiction of the commissioners is both legal and equitable, and "they may inquire into the consideration of a debt notwithstanding a verticit, and if there are equitable grounds on which the verdict is impeachable, they may reject the proof. It may also be inferred, from an observation of Lord Eldon, that the commissioners may inquire into the consideration even though there be a judgment. So it has been determined that the commissioners may inquire into the consideration of a debt notwithstanding an award."—(Henley, 101).

No debt can be proved which rests on an illegal consideration; and a claim cut off by limitation before the flat is of course incapable of being proved. An unliquid debt cannot be proved; as, for instance, a claim of damage not judicially sanctioned. A debt contracted after the flat cannot be proved; and a special clause was requisite to make debts contracted bona fide after the Act of Bankruptcy, and in ignorance of the circumstances, proveable (6 Geo. IV. § 47). Some debts are privileged, and the creditor is

entitled to prove and draw the full amount if there be sufficient funds. These are, the wages of servants and clerks, for the period of six months (§ 48), compensation to apprentices for apprentices fees, their apprentices in being discharged by the bankruptcy (§ 49). By 4 & 5 Wm. IV. c. 40, § 12, where an office-bearer having property of a friendly society in his possession becomes bankrupt, the assigness are bound to deliver over such property within forty days after an authorized demand.

Among the ordinary debts which may be proved, there are to be specially noticed:—

1st, Creditors for future debts, "whether upon any bill, bond, note, or other negotiable security or not," who must deduct interest at 5 per cent. from the declaration of a dividend to the assigned period of payment (6 Geo. IV. § 51).

2d, Sureties. A surety who has paid is entitled to be put in the place of the original debtor, even though he incurred the security after an act of bankruptcy was committed, if he was not aware of the act (§ 52).

3d, An annuity creditor is entitled to prove to the value of the annuity, "regard being had to the original price given for the said annuity, deducting therefrom such diminution in the value thereof as shall have been caused by the lapse of time since the grant thereof to the date of the commission" or fist (§ 54). As annuitar is not entitled to procure a collateral surety for the payment till he have proved. If the surety pay the amount proved, he is discharged of further liability; and if he do not pay it before

any periodical payment of the annuity become due, subsequent to the bankruptcy, he may be sued for arrears, until he have padd the amount proved, with interest at 4 per cent. from the time of notice of proof. On having made payment, the surety comes in the annuitant's place, as a claimant on the estate; and if the annuitant receive any dividends, he must credit them to the surety (\$ 55).

420, Contingent creditors may have their debts valued by the commissioners; and if the contingent event do not intervene so as to enable them to prove for the full amount, they may prove for such value (\$ 56).

563, The obliges in any bottomry or respondent abond, is admitted to claim, and after loss or contingency had happened before the flat; and "the person effecting a policy may prove on the underwriters' estate, though not interested in the policy, if the person really interested be abroad (\$ 53).

563, The holder of a promisory note on which interest is not reserved, over-due at the date of the flat, at the rate allowed by the Queen's Bench in actions on such bills (\$ 57). In other cases, interest is not allowed unless it arise out of the custom of trade, and be thus a matter of presumed contract between the parties.

764, Costs of litigations; as to which Lord Henley observes,—"1. That in any action, whether upon contract or in tort, if a verdict be not obtained till after bankruptey, the costs which result from the verdict and judgment are PROPERTY AND INCOME TAX.

not proveable under the commission. 2. That in tort there is no debt whatever with which the costs can be incorporated until the judgment; and that therefore, if the bankrupty occur after verdict and before judgment, proof cannot be made for the costs" (p. 136).

A creditor holding a security over the bankrupt's estate, must deduct its value from his debt before he can prove. An execution served and levied by seisure of the bankrupt's property, is of this description. A person who has a real security over property by mortgage, pledge, or lien, cannot be compelled to part with it till his debt (with contingent claims of interest, &c.) is paid.

In \$ 50 of the 6 Geo. IV. there are provisions for adjustment in cases of set-off, or compensa-tion of debts and credits between the bankrupt

and his creditors.

(Statutes as quoted. Henley's Bankrupt Law, 100-117. Smith's Mercantile L. 516-547.) [BANK-

100-117. Smith's Mercantile L. 516-547.) [BankBUPTCY.]
In Isrlawd, the law as to the proof of debta
is contained in the act 6 & 7 Wm. IV. c. 14, §
56 to 71, and corresponds with the practice in
England, except that, by § 57, the Lord Chancellor may issue an extraordinary commission for
proof of debts, with the same powers as the Commissioner of Bankruptcy for Ireland, before
whom proofs in Ireland proceed. The method
of litigating proofs differs with the different construction of the court. [Bankruptcy, Courtor.]
In Scotland, the proof of debts in bankruptcy
is chiefly regulated by the act 2 & 3 Vict. c. 41.
[ENGOMETRATION.]

PROPERTY AND INCOME TAX. The first income tax in Britain was PROPERTY AND INCOME TAX. The first income tax in Britain was imposed in 1798, in order to furnish means for prosecuting the war begun in 1793. It exempted incomes less than £60 a-year; those from £60 to £65 were assessed at the yint part; those from 65 to 70 at yith; and the rate progressively increased until the income reached £200 or upwards, when it was taxed at yith, or 10 per cent., the maximum; a variety of abatements being at same time granted on account of children and other burdens. The commissioners of management, chosen by the parliamentary electors, were assisted, or rather overlooked, by government surveyors. But the regulations, though apparently complex, worked well; and notwithstanding that much evasion was practised, the tax, on the whole, was collected with less difficulty and greater fairness than could have been anticipated. It began April 5, 1798, and ended April 5, 1802, after the peace of Amiens; having produced on an average about £5,500,000 annually.

In 1803, the income tax was revived under the name of property tax. As before, it began on income of £60; and gradually increased until the income reached

In 1903, the income tax was revived under the name of property tax. As before, it began on incomes of £60; and gradually increased until the income reached £150, when it was taxed at 5 per cent., the maximum. This rate continued from April 5, 1803, to April 5, 1805, when it was raised to $6\frac{1}{4}$ per cent. On April 5, 1806, it was increased to 10 per cent. on all incomes, however small, arising from land or capital; professional incomes under £50 were exempted; and incomes of that description exceeding £50 and under £150, when they became subject to the full assessment of 10 per cent, were allowed abatements ranging inversely as their magnitude. This tax ceased April 5, 1816. The following is the return of the several species of property on which the assessment was made, and the value of the several species of property on which the assessment was made, and the gross and net amount of the tax, for the year ended April 5, 1815:—

Schedu les	Annual Value of Property.	Gross Assess- ment-	Net Amese- ment.	
A Lands, tenements, hereditaments, or heritages. B Houses, lands, and tenements. C Funded and stock properties (value estimated). D Profits and gains of trade. B Salaries, pensions, &c	38,396,144 30,000,000 38,310,935	9,734,451 2,885,505 3,831,088	2,176,228 2,885,505	
Totals	£178,589,966	£16,548,986	£15,298,932	

In 1842, a combination of circumstances, of too recent occurrence to require explanation, led to the proposal of an income tax by Sir Robert Peel, and its imposition at the rate of 7d. per £1, or £2, 18s. 4d. per cent., on all incomes in Britain

amounting to £150 or upwards; an assessment which Sir Robert estimates will produce £3,700,000. The tax, according to the act, is to extend from April 5, 1842, to April 6, 1845; and the following is a summary of its principal provisions :---

deduction (§ 1).

Ruke for Assessing.—The tax to be levied upon all government annuities or dividends payable in Britain; or in Ireland, if for the benefit of any person not resident there (§ 88); and to be paid by the persons and corporations intrusted therewith, except where the half-yearly dividends are under 50s.; these last are to be

produce £3,7(0,000. The tax, according to the act, is to extend from April 5, 1842, to April 6, 1845; and the following is a summary of its principal provisions:—

American Francipal Provisions or The Income Tax Act, \$ & 6 Vict. c. 23.

The Tax is to be levied under five schedules. Eccasional and impose 7d. per £1 on the annual income or profits from lands, tenements, and hereditaments. "In respect of the property of the prope

tain in the current year; on the later on the average receipts of the three preceding years (§ 100). All yearly interest, whether personal or charged upon property, is liable under this achedule;

PRO

Commissioners instead of the Commissioners for 'taxes. See Income Tax, Supplement.

PROTECTION, PERSONAL. [Personal Protection.]

PROTEST, in the law of bills of exchange and promissory notes, is a notarial instrument, bearing that a bill or note, having been formally presented to the drawes or maker by a notary-public, was dishonoured (by non-payment or non-acceptance, as the case may be), and that the holder protests for recourse (including exchange and re-exchange in foreign bills) against the drawers and indorsers. The laws of the three kingdoms differ so considerably on this subject, that it may be convenient to view them sees retails.

nient to view them separately.

In England, contrary to the usual practice of the rest of Europe, a protest is not necessary for enforcing recourse on a bill at common law. To enforce pay-

not necessary for enforcing recourse on a bill at common law. To enforce payment of foreign bills, however, it became necessary to conform with the rules of the countries where they were drawn, and the necessity of protesting all foreign bills, both for non-acceptance and non-payment, came into observance.

1st, Foreign Bills.—According to established practice, the protest should be made by a notary-public; but if none can be procured, it is said that the protest may be made by an inhabitant, in presence of two witnesses (Bayley, 259). If the person who has drawn the bill abroad come to England, it is not necessary to exhibit a protest to him unless he apply for it. The rules regulating the necessity of protest are the same as those which apply to notice [Norricz]; and so it is not strictly necessary (though it will seldom fail to be prudent) where there are no effects. When acceptance is refused to a bill coming within the definition of those for which a protest is necessary, it should be put into the hands of a notary, who should again present it, and, on a second refusal, he may note the bill, or mark on it his initials, the year and day of the month, and any reason which may be assigned for non-acceptance, together with his charge. The noting has in itself no effect, except as the first step in the protest, which, as an instrument, the notary need not draw out on the spot, but may prepare at his leisure. A similar practice is adopted on refusal to pay. The notary's presentment will be at the place where the bill is drawn or accepted payable, and if at a banker's, during the usual hours of business. By 2 & 3 Wm. IV. c. 98, when the bill is drawn payable at any place other than what it mentions as the residence

but no assessment shall be made when such interest is payable out of income already brought into charge; the party assessed on such income deducting in this case the duty from the interest when he pays it to the creditor, and who is bound to allow sitch deduction (§ 102).

The profits of British trades, &c. are to be assessed by the commissioner for London, Bristol, Liverpool, or Glasgow, at or nearest to where the preperty or remittances have been sent (§ 108).

Statements and returns may be delivered, sealed up, if superscribed with the mame and residence of the party, to the assessor of the partish, or at the commissioners offices, where they are 16 100.

Persons may compound for the duty payable under this schedule for 3 years at an increase of 5 per cent on the first assessment (§§ 143, 145).

Merehants, though not allowed to deduct be sunce periods of another (§ 101); hence, if a person is a partner in two firms, one profitable the other not, he should claim to be assessed separately from the other partners (§ 100).

The tax will be levied by the collector in the ordinary way, unless partles desire to pay it as number or letter, will be given to the pay it as number or letter, will be given to the payit, and a counterpart, without his name, sent to the receiver.

If paid in advance, 4 per cent, per annum of discount allowed (§§ 137, 140).

Persons objecting may appeal to the Special Commissioners of Stamps and Taxes, under the regulations of the assessment (ps 1, 140).

Persons objecting may appeal to the Special Commissioners of Stamps and Taxes, under the regulations of the actis restaing to the assessed the commissioners of Stamps and Taxes, under the regulations of the actis restaing to the assessed them.

Persons objecting may appeal to the Special Commissioners of Stamps and Taxes, under the regulations of the acts relating to the assessed to the commissioners of Stamps and Taxes, under the regulations of the acts relating to the assessed to the part of the regulations of the acts relating to the as

of the drawee, and is unaccepted, it may be protested for non-rayment at the place where it was drawn payable, without requiring to be a second time presented to the drawee. "In practice in this country," says Mr Chitty, "the holder of bills or notes, whether foreign or inland, himself or by his agent, presents the same for payment on the day they fall due, between nine in the morning and five in the evening, and if not paid, he then sends all his foreign bills to a regular notary-public, who sends one or more of his clerks round with such bills in the evening to the respective drawees' residences, and then produces the bills, and again requires payment, and of the charges for noting; and if not paid, he reports to his principal the terms of refusal; and the principal notary afterwards, at his leisure, or as soon as required, draws up his formal protest" (Chit. on Bills, 9th Ed. p. 489). In a former edition, Mr Chitty had laid it down as the doctrine of lawyers, that the demand should be made by the notary-public in person. In reference to this opinion, a correspondence ensued between him and the secretaries of the Society of London Notaries and the Association of Liverpool Notaries, in which it was urged by these bodies that the system as above stated was fixed by a long course of practice. The question has not been the subject of judicial decision, and it may be observed that the practice is in opposition to that of other countries (Traits de Pothier, II. 149). A protest must bear date on the day of payment. 2d, Inland Bills.—In these, protect is solely the creature of statute. By 9 & 10 Wm. III. c. 17, and 3 & 4 Anne, c. 9, § 4, inland bills in England for £5 and upwards, expressing themselves to be "for value received," and drawn payable a certain number of days, weeks, or months after date, may be protested for non-acceptain en and if accepted in writing, may be protested for non-agyment on the day after the last day of grace. The protest, it is enacted, must be sent, or notice given of it, to the party fr

notice of the dishonour of such bill or note shall be given as aforesaid, to any person liable to the payment thereof by reason of such dishonour, the person so receiving such protest or notice, and failing or neglecting to pay the amount of such bill or note so protested or dishonoured, together with the costs of such protest, shall be liable to all costs, damages, and interest, which may and shall accrue thereby" (§ 4). The application of this statute, it will be observed, is not limited to bills for value, or payable within a fixed period after date; and the period of senoing the protest is not fixed to within fourteen days. On the narrative that it is the practice for bankers and others to attend till the hour of six in the afteraoon, for the purpose of receiving payment of bills presented at an earlier hour, and which have not been paid, after which hour they have been sent to a notary-public to be again presented and protested if not paid; "and whereas doubte have existed, whether the acceptors of bills of exchange, &c. have not, by law, till the last instant of the day on which the same respectively may become due to pay the same; and by reason of such doubts, notaries-public in Ireland have been required, at late and unseasonable hours of the night, to receive payment, &c.;" it

is enacted,—that when a notary presents a bill, and it is not paid by 9 o'clock P.M., it shall be dishonoured, and may be protested (§ 12). Notaries are to register bills delivered to them for presentment. All notarial charges (which are fixed

it shall be dishonoured, and may be protested (§ 12). Notaries are to register bills delivered to them for presentment. All notarial charges (which are fixed by the act) fall on the party liable to pay the bill; and he is liable for the expense of notarial presentment, then the bill be honoured on such presentment, if it have not been so on the presentment of the party. The notary may demand the charges from the person liable, and, in case of refusal, may refuse to receive acceptance, or payment of the principal sum, as the case may be, and hold the bill dishonoured (§ 13).

IN SCOTLAND, protest for non-acceptance and non-payment is, both in the case of inland and foreign bills, an essential part of due negotiation, and necessary to found recourse against drawers and indorsers. Besides being essential to a claim of recourse, it is necessary for recovery even against the original party bound as maker or acceptor, where recourse is sought through the peculiar facilities for enforcing payment of bills of exchange in Scotland, by summary diligence. [Dilicance.] The protest is taken by a notary-public, in presence of two winesses. It cannot be supplied by any description of evidence as to the knowledge of the party that recourse was to be claimed against him, or even by a reference to his own oath to that effect. It appears to be held as law in Scotland, that the presentment for protest must be by the notary himself, and not by his clerk. In practice, the bill is noted on the day of presentment for acceptance, or the day of payment (being the last day of grace, where days of grace are allowed), and the instrument of protest is drawn up afterwards. To render summary diligence competent, the protest must be recorded within six months—if for non-acceptance, from the date of the bill—if for non-payment, from the time for payment. (Thomson on Bills, of the bill-if for non-payment, from the time for payment. (Thomson on Bills,

At 42-46.)

PRUNES, or Dried Pluss, are brought from the south of France, particularly Tours; they are oblong and rather sweet. The best are the *Prunesus de St Julien*. Prunelloes, a kind of a reddish-yellow colour, brought from Provence, have a sweet, grateful taste, with a slight and pleasant acidity. The importations are subject to considerable fluctuations.

are subject to considerable fluctuations.

PRUSSIA, a powerful European kingdom, occupying a great part of the N. of Germany and the N. portion of what was formerly Poland, extends from 49° 8′ to 55° 50′ N. lat., and from 6° to 22° 50′ E. long. Provinces—1. Prussia Proper; 2. Pomerania; 3. Posen; 4. Silesia; 5. Brandenburg; 6. Prussian Saxony; 7. Westphalia; and 8. Rhine. Area, 106,500 sq. miles. Population in 1840, 14,907,091. Capital, Berlin, an inland city; pop. 265,394. Government, an hereditary monarchy, with a council of state, and, since 1823, provincial assemblies, to whom laws are submitted for deliberation; but the royal prerogative is more substantially modified by the power resulting from the intelligence and military organization of the neonle.

The six provinces first mentioned, bounded N. E. and S. by Mecklenburg, the Baltic, Russia, Poland, Austria, and Saxony, are separated on the W. by Hanover, Heese-Cassel, and other small German states, from the provinces of Westphalis and Rhine, which again are bounded on the W. and S. by the Netheriands, Belgium and France, and Bavaria. To these provinces, spread over so wide a surface, no general description will apply; but they mostly present a sevel aspect,—so much so, that many marshes and lakes have been formed by the inundations of the rivers. The mountain-tracts of the Harts in Saxony, and the Riesengeberge in Silesia, are chiefly en the frontier. The rivers traversing the country, as the Rhine, Weser, Ribe, Oder, and Vistia, flow generally, with a slow current, from south to north. In the western provinces the climate is warmer than that of England; in the eastern it is cold, and also very moist along the shores of the Raltic. On the whole, the soil is sandy and poor. The most fertile and populous districts are Silesia, Rhenish Prussia, and Saxony, particularly the plain of Magdeburg.

Agriculture, though in a backward state, is improving. The rural products resemble those of Britain; differing chiefly in the more extensive cultivation of rye, which, with potatoes, forms the principal food of the lower classes. Flax and hemp are largely raised; also discoy and beet, which last yields about a fourth part of the sugar consumed. Tobacco, hops, and madder, are likewise cultivated; and in the Rhenish districts wine is made. In 1837, the number of hores is labe kingdom was 1,472,901; cattle, 4,539,622; sheep, 16,011,422; goats, 337,525; and hogs, 1,536,304. Of the sheep, 3,617,469 were pure merinos, and 7,185,068 half-bred: these fine kinds are principally in Saxony, Silesia, and Brandenburg, and their wool forms the great staple of the kingdom. The small occupiers of land are usually proprietors; the larger owners generally cultiviste their estates through stewards,—there being few farms except on the crown

coast.

Prussis is mainly an agricultural country, though the Rhine, Saxony, Silesia, and some other parts, are now distinguished for several branches of manufactures. The latter are chiefly in the Rhine province, on the Wupper, in and around Eiberfield and Solingen, which abounds nool and waterpower, and where cotions, silks, and linens are largely produced. Linens are also made for ex-

portation in and ar mind Hirchberg in Silesia, in Westphalia, and in Erneland in Ducal Prussia. Superior broadcloth is made at Upon, Malmedy, Berlin, and Aix-la-Chapelle; and both lineas and woollens for domestic use are woren in aimost every cottage. Hardware and cuttery are largely made at Hagen, Iseriohn, Solingen, Olpe, and Essen; and Berlin is celebrated for its castiron articles. Beer is extensively brewed in all parts; and the consumption of spirits is estimated at nearly 45,000,000 Imp, gallons a-year! Berlin and Halle are the chief seats of the book-trade. The internal trade of Prussia is facilitated by numerous rivers, almost every where navigable, and so connected by canala, that goods may be transmitted even between Hamburg and Dantsle Excellent carriage-roads also abound, with mail-coaches on the principal lines; and railways have been formed from Berlin to Potsdam and to Stettin, between Cologne and Aix-la-Chapelle, and in other places.

The internal trade of Friussia is facilitated by numerous rivers, almost every where mavigable, and so connected by canals, that goods may be transmitted even between Hamburg and Dantzic-Excellent carriage-roads also abound, with mail-coaches on the principal lines; and railways have been formed from Berlin to Fotsdam and to Stettin, between Cologne and Aix-la-Chapelle, and in other places.

The external commerce of the kingdom is likewise considerable, and rapidly increasing; though, since the cetablishment of the Customs Union, its amount caanot be ascertained. It extends to almost all parts of Europe, and to America; but the chief interocurse is with the other German states, Britain, Russia, Sweden, Denmark, and the Netherlands. The British trade (except the hipment of grain and timber from the Baltic ports) is mostly carried on at second hand through Hamburg. Bremon, and the Netherlands ports, especially Rotterdam. The imports embrace sugar, coffee, cotton wool, twist and staffs, and English manufactures of various kinds; dyeing substances, spices, wines, said a government monopoly), and coals. The supports coalst principally of raw produce, mostly corn, wool, timber, since, land coals. The supports coalst principally of raw produce, mostly corn, wool, timber, since, land the colonial principal states, and before the corn, and the support of the part of the corn, and the colonial principal states, and before the corn, and the support of the particle and Mernel from Russian Poland; from whence likewise the corn exported is principally derived. The shippents of grain from Prussia amounted to 25,103,756 scheffels, or about 4,744,610 Imp. quarters, principally wheat, but including considerable, especially to Britain, Bolland, and Norway, in years of scarcity. In 1839, 1839, and 1840, when the crops were deficient in England, the total shipments of grain from Prussia amounted to 25,103,756 scheffels, or about 4,744,610 Imp. quarters, principally wheat, but including considerable quantities of rye, barley, oats,

MEASURES, MONEY, FINANCES, &c.

Measures and Weights.—The Prussian or Rhineland foot of 12 inches = 12:366 Imp. inches; the ell of 26 prussian inches = 26:26 Imp. inches; and 100 ells = 72:94 Imp. yards; the fathom is and 100 ells = 72:94 Imp. yards; the fathom is 50:00 perches = 82:37 Imp. yards.

The morgen or acre of 180 aq. perches = 30:44 Imp. sq. yards, or 2 Imp. roods 21 poles nearly; and the ruthe or perch 12 feet. The mile of 20:00 perches = 82:37 Imp. yards.

The morgen or acre of 180 aq. perches = 30:54 Imp. sq. yards, or 2 Imp. roods 21 poles nearly; and the firs 30 morgen.

The ohm, liquid measure, of 2 eimers, 4 and the firs 30 morgen.

The pound of (2 Cologne marks) 32 loths, or 25 ump. roods 21 poles nearly; and the firs 30 morgen.

The scheffel, corn measure, of 16 metzen, or 616 metzen, or 84 guarts, = 1 13:18 Imp. bushel, or 54 scheffels = 1 Imp. quarter nearly; and 100 extended s = 1 Imp. quarter near

their finences is expressed in the manner explain-ed under the head GERMANY. The prices of both metals are usually stated in Prussian do-lars per mark fine.

groechen: In copper; 4, 3, 2, and 1 pfenning

their finences is expansed in the manner explainduder the head Germany. The prices of both metals are usually stated in Prussian dollars per mark fine.

The following old measures are still partially in use:—
Berlin.—The oil = 26-26 Imp. inches; the ohm of 9 elmen, or 126 quarts, = 39-77 Imp. gallons; the last of wheat of 3 wispels, or 73 scheffels, = 103-64 Imp. bushels; and the last of oats of 2 wispels = 69-93 Imp. bushels; the centuer of 110 Ibs. = 113-93 Ibs. avoicationis.

Dantzic.—The ell of 2 feet = 23-6 Imp. inches; the ohm of 2 elmen, or 126 quarts, = 39-77 Imp. gallons; the last of 32 maiters, 60 scheffels, eventue in 1041, 55,867,000 thales, or 740 viertels, = 90-24 Imp. bushels. A last of timber is 80 etable feet; and a last of pipe stres is 4 schooks or 240.

Konigsberg.—100 oid Prussian ells = 63 Imp. yards nearly. The stof = 0-316 Imp. gallon. The last of 60 old or 564 new Prussian scheffels = 85-43 Imp. bushels.

Money.—Accounts are now stated in thalers or ollars of 30 silver groechen, equal £1.

The Prussian dollar was formerly divided into 46 good groechen. The Dantzic florin of 30 groechen = 9d. sterling; and the florin in Prussian currency = 1a sterling.

The coins are,—In gold; double, single, and half Fredericks, of the nominal value of 10, 5, and 23 dollars, but bearing generally an agio of 15 per cent. above currency; these are minted at the rate of 35 to the Cologne mark 65-72ds fine: In silver; dollars minted at the rate of 10 to the Cologne mark 65-72ds fine: In silver; dollars minted at the rate of 10 to the Cologne mark 65-72ds fine: In silver; dollars minted at the rate of 10 to the Cologne mark 65-72ds fine: In silver; dollars minted at the rate of 10 to the Cologne mark 65-72ds fine: In silver; dollars minted at the rate of 10 to the Cologne mark 65-72ds fine: In silver; dollars minted at the rate of 10 to the Cologne mark 65-72ds fine: In silver; dollars minted at the rate of 10 to the Cologne mark 65-72ds fine: In silver; dollars minted at the rate of 10 to the Cologne mark 6

PRUSSIAN BLUE, the ferrosesquicyanuret of iron of chemists, a pigment or dye, composed of cyanogen and iron, and procured by a chemical process from carbonate of potassa, bullock's blood, green vitriol, and alum. It is prepared of different degrees of purity, and additions are made to it according to the purposes for which it is required. When pure, it is of a rich and intense blue, with a copper tint upon its surface; inodorous, tasteless; insoluble in water, in alcohol, and in dilute acids; but is acted upon and dissolved by strong acids. It is extremely hyperpretic for after having home well dried it modelly attracts

In dittle soids; but is select upon and dissolved by strong soids. It is calculated by hygrometric, for, after having been well dried, it speedily attracts moisture.

PRUSSIC ACID, or hydrocyanic acid, is obtained by the action of muriatic acid on bicyanuret of mercury. It is limpid, very volatile, and of a strong pungent odour, resembling that of bitter almonds. Its taste is acrid, and it is virulently poisonous. Sp. gr. 706. In medicine it is used as a sedative.

PRUSSO-GERMAN CUSTOMS UNION on ZOLLVEREIN. This association is a strong action of the control of the contr

PRUSSO-GERMAN CUSTOMS UNION on ZOLLVEREIN. This association for assimilating, uniting, and simplifying the fiscal arrangements of the numerous states of Germany, though it naturally arose out of the advancing civilisation of that country, derived its immediate origin partly from the circumstances resulting from the last European war. For a series of years prior to 1814, the "Continental System" of Napoleon, and other hostile obstructions, by nearly excluding British merchandise, had the effect of creating and extending manufactures in various parts of Germany. None of the tariffs of the different states being then prohibitory, except that of Austria, the young manufactures became exposed on the return of peace to the crushing competition of England, and great distress was produced, particularly in the Rhenish provinces, which had at the same time the vast markets of France withdrawn from them by their transfer from that power to Prussia. Influenced partly by the discontent of these provinces. same time the vast markets of France withdrawn from them by their transier from that power to Prussia. Influenced partly by the discontent of these provinces, and partly by the exclusion of all her leading staples, except wool, from the markets of Great Britain, Prussia, in 1818, issued a new tariff, which raised the duties on the imports into her dominions. This new tariff, however, though amply protective to her own subjects, aggravated the difficulties of the manufacturers of the smaller German states, whose products it excluded, and who also, shut out from France and Austria, and having their internal trade impeded by numerous and conflicting customs and transit regulations, were new each nearly confined to

the narrow limits of their respective domestic markets. The distressed manufacturers naturally sought a remedy for these evils; and in 1819 an association was turers naturally sought a remedy for these evils; and in 1819 an association was formed at Nuremberg, which, gradually numbering 6000 members, ultimately forced the subject upon the attention of the German governments. Many negotiations took place; at length, in 1827, a Customs Union was formed between Wurtemberg and Bavaria; next followed the treaty between Prussia and Hesse in 1828; and about the same time a third union, the Mittel Versia, took place between Saxony, Hanover, and some minor states. The former two were soon united by the eventions of Prussia; through whose influence likewise saveral states. Saxony, Hanover, and some minor states. The former two were soon united by the exertions of Prussia; through whose influence likewise several states were detached from the Mittel Verein, which was afterwards dissolved. And in 1833, nearly the whole of the members of these unions were associated into one great league, the Zollverein, which came into operation January 1, 1834; and being afterwards joined—in 1835 by Nassau and Baden; in 1836, by Frankfort; in 1841, by Brunswick and Lippe-Schaumberg; and in 1842, by Luxemburg,—now comprises almost the whole of Germany, except the parts subject to Austria, Hanover, Oldenburg, Mecklenburg, Holstein, and the Hanse Towns.

By the convention of the Zollverein all restrictions to communication and transit

By the convention of the Zollverein all restrictions to communication and transit are removed, internal custom-houses abolished, and a common system and collection of export, import, and transit duties established, to be levied at the exterior boundaries of the frontier states, and divided among the members of the league according to their population: a common system of monies and weights was also provided for; and it was agreed that there shall be a meeting of plenipotentiaries of the associated governments, in June annually, at which the affairs of the league shall be discussed. The duration of the convention was provisionally fixed for January 1, 1842; but if not then terminated (by two years' previous notice), it shall be considered as prolonged for 12 years, and so on from time to time for a further period of 12 years.

further period of 12 years.

STATEMENT of the Total Population of the Zollverein, and of the Amount of Customs Duties received, with the Average Amount per Individual in Silver Groschen and Pfennings, and the per Centage Cost of Collection, in each Year from 1834 to 1838.

	1	1	Gross	Average	Cost of Col-			
Years.	Population.	On Imports. On Exports.		On Transit.	Total.	per Indivi- dual.	lection.	
1834 1835 1836 1837 1838	23,478,190 23,752,354 25,719,582 26,013,717 26,048,970	Prus. Doll. 13,763,458 15,731,182 17,332,770 16,866,187 19,235,823	Prus. Doll. 422,450 502,494 521,375 408,549 551,537	Prus. Doll. 529,534 596,158 487,321 592,310 534,987	Prus. Delt. 14,715,442 16,759,834 18,341,466 17,867,046 20,322,347		16 per Cent. 14 124	

In the year 1839, the total gross receipts amounted to 20,569,486 Prussian dollars; in 1840, to 21,293,232; and in 1841 (as shown below), to 21,915,944 dollars.

The following Table shows the Area and Population of the several Members of the Zollverein, the Amount of Duty raised, and the Shares of the Net Receipts in the Year 1841.

	Sq. miles.	Population.	Duty Raised.	Share of Net Receipts.
1. Prussia, and the states which have come to an agreement with her. 2. Bavaria. 3. Baxony. 4. Wurtemberg. 5. Grand Duchy of Baden 6. Electorate of Hesse 7. Grand Duchy of Hesse 8. Thuringian Association 9. Duchy of Nassau.	31,259 5,749 8,150 5,915 3,853 3,793 4,940	1,705,276 1,703,258 1,294,131 666,280 820,907 952,421	1,681,171 1,878,176 474,448 846,364 408,673 515,444 348,212	3,158,621 1,239,727 1,391,334 936,847 480,193 637,415
10. Frankfort-on-the-Mains	174,535 92	27,075,985 66,338		
	174,627	27,142,323	21,915,944	20,660,864

The progress of the Zollverein was jealously watched in this country, as the tariff adopted by it was more unfavourable to the admission of British goods than

the tariffs previously existing in the other states; and our manufacturers feared, with apparent reason, that their trade would suffer in every case where additional duties were imposed. It is impossible to investigate this question minutely, as the trade between Britain and the states of the League passes not only through German ports, but also through Holland and Belgium,—the principal channels being Hamburg and the Elbe, Rotterdam and the Rhine, and Bremen and the Weeer. But a general estimate will be obtained by a comparison of our trade with all these places.

DECLARED VALUE of British and Irish Produce and Manufactures exported to Germany, Holland, and Belgium, in the following Years.

	Average of	Five Years.	1839.	1840.	
	1829-33.	1834-38.	1039.	1040.	
L	£	£	£	£	
Hanse Towns	4,358,650 42,364	4,665,767 32,845	3,215,155	5,408,499	
Prussia	192,497	159,035	206,866	219,345	
Holland	2,402,546	2,843,550 856,150	3,563,792 881,831	3,416,190 880,286	
Total	6,996,057	8,550,347	9,867,644	9,924,320	
Whereof — (Manufactures*	9,130,161	2,152,206	1,901,308	1,905,128	
Cotton Twist and yarn		3,349,856	4.098.977	4,099,175	
T.i (Manufactures	13,942	39,397	58,984	73,308	
Yarn	480	51,970	152,677	168,410	
Woollen Manufactures	897,972	1,055,291	1,267,489 322,886	1,139,631 357,999	
Machinery and mill-work.	157,484 13,984	255,500 90,365	170,361	173.013	
Hardware and cutlery		137,790	153,195	157,269	
Brass and copper manufactures	58,286	130,355	200,709	209,515	
Iron and steel	142,316	287,360	411,247	440,070	
Coals	45,105	67,190	123,101	120,679	
Refined sugar	489,983	92,303	8,399	5,083	
All other articles	622,433	840,764	998,311	1,075,040	

The above, while it exhibits a highly satisfactory increase in the amount of our exports, shows also, as already noticed [Commerce], that that increase mainly consists of raw products and half-manufactured articles, as coal, iron, steel, twist, and yarn. This is quite in harmony with the tariff of the Zollverein, which admits raw materials, and materials serving the ends of agriculture and manufactures, either without any, or on very low duties. Thus, raw cotton, wool, coal, pig-iron, ores, raw hides and skins, potashes, turpentine, chalk, rags, manure, earths, black-lead, wood, seed, and such like, are exempt from duty; and low rates are imposed on twist and yarn, the produce of our superior machinery; metals in the earlier progress of manipulation; and all articles to which more labour is to be applied. But the duties press heavily, or rather prohibitorily, on articles entering into competition with the manufactures of Germany, which are generally of a coarse heavy kind: this is effected by the imposition of a fixed rate on the weight of the goods imported, without any reference to quality or fluctuation of prices; so that it falls lightest on fine goods and heaviest on the common kinds. They are on cotton manufactures, \$7, 10s. per cwt.; on woollens, £4, 10s.; on hardwares, £8, 5s.; on common linens, £3s.; on fine linens, £3, 6s.; and on silks, £16, 10s. per cwt. Estimated ad valorem, the duty on cottons varies in this way from 3½ to 120 per cent., and on woollens from 20 to 50 per cent.; and these per centages will of course increase according as the articles fall in price. The necessary operation of this system is the exclusion from the markets of almost all the commoner articles of foreign manufacture; in short, all those largely consumed in Germany, for which a complete monopoly has been created in favour of the home producer.

The manufactures of Germany, however, are not to be considered as deriving their existence solely from tariff protection. Many kinds,—as those of linens and woollens,—have been long established; and their cotton manufacture, though of somparatively recent introduction, has in some departments, particularly hosiery [Hosikhy], even outstripped that of Britain. In truth, much of the progress of manufactures in Germany is the natural result of her return to the arts of peace.

^{* &}quot;The decrease in cotton goods has been chiefly in printed cottons; especially in red printed cotton, or Turkey reds, in which the dyers and printers of Germany and Switzerland such those of all other countries. It is indeed probable that British printed cottons will very shortly cease to be used in any of the Zollverein states."—"Macgragur's Commercial Turiffs, &c., part v. p. 69.)

A monopoly of cheap production, and the exclusive possession of advantages for which civilized man is every where struggling, cannot be always retained by England. Without possessing perhaps the enterprise of the British and Americans, the Germans excel in judgment, calculation, and perseverance; and they have aptitudes and facilities of their own, which greatly aid the development of their industry. Their habits are eminently frugal; and wages are very low, especially in Saxony, where potato cultivation and the cotton manufacture appear to have advanced simultaneously. Elementary instruction is provided for all, and special instruction for those who exhibit any particular genius; and the arts of design, metallurgy, and chemistry, are better understood than with ns; while even in those branches in which our superiority is the moet marked, such as machinemaking, competition is rapidly marching after us. To these influences has now to be added that of the Zollverein, which, by rendering its numerous states commercially one country, with one frontier, establishing in fact perfect free trade among 27,000,000 of people, and leading in every direction to extensions of the means of internal communication, has given a prodigious impulse to every department of

industry.

Yet, after allowing for all these circumstances, the immense capital, and other advantages which still render Britain superior to the rest of the world in manufacturing power, would, there can be no doubt, enable it to export much more largely to the states of the Zollverein were their tariff more liberal. Instead of any modification, however, it is feared by many that the protecting system will be extended, so as to exclude the yarms and other half-manufactured articles of which our exports now mainly consist; and it is certain that the tendency of the predominant legislation of Germany is to secure more and more of the home market in every stage of the process of manufacture. But this predominancy, we may remark, is rather owing to the youthful vigour, activity, and concentration of the manufacturing interests than to their importance compared with those of agriculture. The latter, which are much more diffused, more productive, and represent a vastly greater amount of capital and labour than the former, are, and must long continue, intimately connected with the foreign trade of Germany; for it is to distant markets alone they can look for the sale of that surplus produce which home demand does not consume; and their just influence will doubtless be restored when the Zollverein shall, by its consolidation, have become sufficiently powerful to repress the local and partial influences of its various elements, and blend them into the paramount interests of the whole. To this restoration the progress of commercial legislation in this country, as indicated by the late modification of our tariff, will contribute, as well by checking the flow of capital from rural to manufacturing pursuits in the states of the Zollverein, as by inciting the agricultural interests in those states to conderate system of duties that contraband trade can be prevented, and a healthy action permanently communicated to the manufacturing interests themselves. We have, therefore, just grounds to believe that the restrictive tendenc

commerce, an important share of this commerce must continue to be held by Britain, from the great amount, variety, and cheapness of her merchandise.

The members of the Zollverein desire its extension; but, by its fundamental organization, no states can be admitted but those of Germany,—the league being indeed partly the result of a popular feeling among those states for unity and nationalization. Of the different members, Saxony is that which on the whole has profited most by the League, for in that country manufacturing industry being most developed, it had the vantage ground in competing with the others; and new and extensive markets were opened to her, and at the same time closed to a great extent against foreign rivals. Frankfort-on-the-Maine, again, is that which has experienced least benefit from the League. [Frankfort.] Prussia, though the leading and most zealous member, is, in a financial point of view, situated less advantageously than she would have been had her independent tariff been continued: many of her protected classes have likewise suffered from the competition of Saxony. This has led to the general belief that the ostensible object of the Zollverein is neither the only nor the chief motive which has influenced that power, but rather political views, extending beyond the interests of the present day, and tending to its own aggrandisement. The origin of the union, however, was, as we have already explained, commercial; and this circumstance extengthens the probability of its duration; but political consequences of the greatest importance cannot fail

to arise from the external relations of the Zollverein. Indeed, the distinction between a commercial union and a political alliance is an imaginary one; since, whatever so completely unites the interests of different bodies of people, must combine their policy, their diplomacy, and, in the event of danger, their strength.

WEIGHTS, MONIES, CONVENTIONS, &c.

Weightz.—The weight adopted by the League as the basis of their tariff, is the centure or hundredweight of the duchy of Baden, which is divided into 100 pounds, each equal to the livre usuelle, or § kilogramme of France. The Zoll-centure of 160 hz. is therefore equal to 110-243, or very nearly 110§ avoird. hs.; and 100 avoird. hs. = 90-708, or nearly 90§ Zoll-pounds. Also, 65 Zoll-centurers = 64 avoird. hundredweights nearly. The Zoll pound is divided into 30 loths. The following equations are given in the tariff;—

2di penda 2di penda 100 Prusian Ibs. 2di penda 200 = 1000 Bavarian Ibs. 2000 = 1000 Bavarian Ibs. 2000 = 1000 Kilogrammes. 235456 = 1000 Wurtemberg Ibs. 233473 = 1000 Saxon (Dresden) Or, approximately, 14 = 15 Prussian Ibs. 28 = 25 Bavarian Ibs. 2 = 1 Kilogramme. 14 = 15 Wurtemberg Ibs. 15 = 15 Saxon (Dresden) Ibs. Aiso.

2.01-reatisen.
36 = 35 Prussian centners of 110 lbs.
28 = 25 Bavarian centners of 100 lbs.
2 = 1 quintal of 100 killogrammes.
36 = 37 Wurtemberg centners of 104 lbs.
36 = 35 Saxon (Dreaden) centners of 110 lbs.

**Money.—The integer of account in the northern states is the Prussian dollar (thater) or crown of 30 silver groaches; in the southern, the Bavarian guilder or florin of 60 kreutzers. The former is equivalent to 2a. 104d., the latter to 1s. 8d. sterling; the Cologne mark of pure silver, of 233°855 grammes, being represented by 14 dollars or 944 florins. Hence 1 dollar = 12 florin; 1 florin = \$ dollar; and 15 silver groachen = 59 kreutzers.

A new coln has been struck, common to all

A new coin has been struck, common to all the states, of the value of ith of the mark of pure silver, and equivalent consequently to 2 Prussian dollars, 3 Bavarian florins, or 5e. 94d.

event of danger, their strength.

Conventions, &c.

sterling. It bears the effigy of the King of Prussis, and has on the reverse the inscription of Vereins Minne, or "Union's Money."

Treaties of Commerce have been effected with Holland, the Hanne Towns, and Great Britain. The last mentioned, negotiated with Prussis, March 2, 1841, provides that the vessels of the states of the Zoilverein, with their cargos, consisting of goods legally importable into the United Kingdom and colonies, by the said vessels, from the ports of the countries to which they respectively belong, shall, when coming from the months of the Meuse or Elbe, or any navigable river lying between these streams, and communicating with any of the said states, be admitted into the ports of the United Kingdom and colonies, in as ample a manner as if the ports from which such vessels may have come were within the dominions of any of the said states; and such vessels shall be permitted to import the said goods upon the same terms on which they night be imported if coming from the national ports of such vessels.

In like manner, such vessels proceeding from the United Kingdom and colonies to the ports and places thus referred to, shall be treated as if returning to a Prusian Baltic port,—the being understood that these privileges are to extend to the vessels of the states aforesaid and their cargos, only in respect to each of the said ports in which British vessels and their cargoes shall, upon their arrival and departure, continue to be placed upon the same footing as the vessels of the states of the Zoilverein.

This treaty, unless terminated Januaryl, 1848, by 6 months previous notice, was to remain in

the states of the Zollverein.
This treaty, unless terminated Januaryl, 1848, by 6 months' previous notice, was to remain in force until Januaryl, 1854, and further until the end of 18 months after notice by either party. Further information will be found in Dr. Bowring's "Report on the Prussian Commercial Union," 1840, and in Mr. Macgregor's "Commercial Tariffs and Regulations of the several States of Europe," &c. part v. July 1842. See Article in Supplement.

Prustan dollars, 3f Bavarian florins, or 5s. 94d. 'Attacke in SUPPLEMBER'.

PULLICATES, cotton handkerchiefs, checked, of various colours.

PULQUE, a spirituous liquor made in Mexico, from the maguey or agave.

PUMICE STONE (It. Pietra pomice) is generally assumed to be a lava or volcanic glass, though it does not occur in all volcanic countries. It is extremely porous, of a fibrous texture, and is harsh to the touch; colour gray, tinged with brown or yellow; it has a shining, pearly lustre, and is very light. Pumice is quarried and exported in large quantities from Lipari and the isless of Ponza. It is used for polishing metals and other purposes in the arts.

PUNCHEON, a measure of capacity for liquids. [Measure, Wine.]

PURPLE WOOD, a tropical cabinet-wood, lately introduced, said to be the produce of a kind of thorn. It is a narrow wood, being only about four inches wide, of a purple colour, and without veins.

PUTCHUCK, the fleshy root of a plant growing in Gujerat. It is largely exported from Bombay and other ports of the N.W. of India to China, where it is used as incense. In its commercial state it is generally mixed with impurities.

ported from Hombay and other ports of the N.W. of India to China, where it is used as incense. In its commercial state it is generally mixed with impurities. PUTTY, a vulgar name for the peroxide of tin, generally used for polishing mirrors and lenses, and for rendering glass white and opaque, converting it into enamel; and for other purposes in the arts. This must not be confounded with the putty of glasiers, which is prepared by kneading chalk with linseed cil.

PYROLIGNEOUS ACID. [AGETIC ACID. VINEGAR.]

Q.

QUA

QUARANTINE Laws, regulating the intercourse with countries subject to pestilence, originated in the 15th century in Venice; and, though also applied to cases of cholera and yellow fever, owe their introduction, as well as their continuance, to dread of the plague of the Levant. Intercourse, and subjecting men and animals communicating with the country affected by or suspected of contagion, to a probationary confinement, and goods and letters brought from it (and hence assumed to contain contagious poison) to a proposed desurvation. The confinement and desurvation are placed on shipheard process of depuration. The confinement and depuration take place on shipboard, or, as in Malta, Marseilles, and other Mediterranean ports, in isolated establishments called lazarettoes. Goods are subjected to quarantine according as they are

or, as in Malta, Marseilles, and other Mediterranean ports, in isolated establishments called lazarettoes. Goods are subjected to quarantine according as they are non-susceptible, a class embracing wood, metals, and fruits; or susceptible, including all animal substances, such as wool, silk, and leather, and many vegetable natters, such as cotton, linen, and paper,—the whole of which are opened up, ventilated, and sometimes fumigated. Every ship is furnished by the sanatory authority, at the last port where it touched, with a bill of health, which when clear generally exempts the passengers and goods from quarantine; but if suspected or foul, subjects them to it for periods, differing according to circumstances, from about to 40 days; from which last period the term quarantine is derived. The countries upon the Levant are considered as permanently in a state of suspicion; and no ship sailing from any of them is considered to bring a clean bill.

These laws are of little importance, except with reference to the Mediterranean trade. British vessels clearing out from the United Kingdom for any place in the Mediterranean or West Barbary, or any other port subjected to quarantine regulations by Orders in Council, are to receive from the Customs Office a printed abstract of the existing regulations (6 Geo. IV. c. 78) for their guidance. Vessels from the Mediterranean and West Barbary, with clean bills, are to perform 15 days' quarantine, to which likewise are subjected ships communicating with such vessels, as also those which, though arriving from other ports of Europe or of America (without quarantine establishments), have on board susceptible articles, the produce of Turkey, Egypt, or Barbary. Vessels with foul or suspected bills are to perform 30 days' quarantine; and if pestilential disease shall appear during that time, the quarantine must commence anew. Ships from the Mediterranean and West Barbary, not having any infectious disorder on board, but without clean bills of health, are to repair to Standgate Creek United Kingdom.

These regulations form a serious and in most respects an unnecessary burden upon commerce. Plague is now said by many to be an epidemic merely; and, though the weight of authority is still in favour of its being also contagious, it is though the weight of authority is still in favour of its being also contagious, it is established to be so in a mode and degree much less than was formerly supposed. There is no distinct evidence of merchandise having ever acted as a conductor of plague; and the received distinction between susceptible and non-susceptible commodities is now held to be fanciful. Great doubts are also entertained as to the capability of the lower animals to communicate the disease. But, provided circumstances be favourable to the transmission of plague, it is still believed that it can be communicated by one person to another, as well as through the medium of the clothes and bedding of patients. The duration of quarantine is besides the subject of deep complaint: the virulence of plague, it is now admitted, must prevent its poison from remaining long latent in the human body; and, according to the most skilful observers at Malta and elsewhere, the disease usually appears from the third to the sixth day after communication; never after the fifteenth.

But popular jealousy, as well as the impracticability of effecting a beneficial change without the consent of all neighbouring countries, are obstacles to any alteration of the existing system. Thus, if without such a general agreement, the British government were to change the regulations at Malta, the pratique granted there would not be received elsewhere,—a circumstance which would be fatal to its transit trade, and also to its importance as a quarantine station, now daily increasing from the use of the overland journey to India via Egypt. It is probable,

therefore, that no great alteration will ever be effected, except through medical com-

therefore, that no great alteration will ever be effected, except through medical commissioners, acting under the directions of the chief powers of Europe.

QUARTER, a measure of capacity for corn. [Measures.]

QUASSIA, an intensely bitter wood, obtained from two trees, the Q. amara of Guiana, and the Q. excelse of Jamaica; though the produce of the former is now rare. It is imported in billets; but before being used is cut into chips, which are scent-less, and of a light gray colour,—becoming yellow or brownish, however, by long exposure. It is used medicinally as a tonic, and, though forbidden by statute, by some brewers as a substitute for hops. Another variety, the Q. simaruba, yields the tonic bark called simarcuba, imported in bales from the West Indies.

QUERCITRON BARK, an important yellow dye, the produce of a species of oak (Querous tinctoria or nigra) indigenous to N. America.

QUICKSILVER. [Meacury.] S

QUINCE, a yellow-coloured fruit, of an austere acid taste, the produce of a species of pear-tree (Cydonia vulgaris) indigenous to Crete, but common in France, particularly on the Garonne, and also in the S. of England. It is said to be the same with the celebrated apples of the Hesperides. Quince seeds abound in mucilage, and are an article of the materia medica.

and are an article of the materia medica.

QUININE, a white powdery vegetable alkaloid, extracted from the yellow Peruvian bark, and for which it is now advantageously substituted as a medicine, QUINTAL, generally signifies the weight of a hundred pounds.

R.

RABBIT. [Furs.]

RABBIT. [Furs.]
RACOON, a small species of bear (Ursus lotor), valued for its fur, which is used in hatmaking. Its hair is gray, soft, long, and thick, white in the middle, and black at the ends; eyes surrounded with black patches; tail annulated. It inhabits Jamaica and N. America, especially Kentucky.
RAGS (Du. Lompen. Fr. Chiffes, Drapeaus, Drilles. Ger. Lumpen. It. Stracci, Strasse. Por. Farrapos, Trapos. Rus. Trepje. Sp. Trapos, Andrajos), or tattered fragments of cloth, are of importance in the arts, more especially when of linen or cotton, for their use in papermaking. The rags of which British paper is made are mostly imported, chiefly from Hamburg, Bremen, Rostock, Ancona, Leghorn, Messina, Palermo, and Trieste. They arrive in our ports in closely packed bags, containing each about 4 cwts.; which, according to the respective qualities of the rag, are marked S. P. F. F., S. F., F. F. F. X., and F. B. There are, however, many varieties even in these divisions. About 10,000 tons are annually entered for home consumption. They are generally darker, dirtier, and coarser than the English, but on the other hand are valued from being chiefly linen, while those collected at home are mostly cotton. France, Holland, and Belgium prohibit the exporta-

lish, but on the other hand are valued from being chiefly linen, while those collected at home are mostly cotton. France, Holland, and Belgium prohibit the exportation of rags, in order to encourage their own long-established paper manufactories: Spain and Portugal likewise enforce a similar prohibition. Of late years, also, the shipments from Sicily have been checked by the imposition of an export duty of 2s. per cwt.; while those from Leghorn to this country have greatly declined, owing to the competing demand of the Americans. [Paper.] 8

Woollen rags are commonly used as manure; but some kinds are unravelled, and, after being mixed up with fresh wool, manufactured again into coarse cloth.
RAILWAYS (Fr. Chemins de fer), made rudely of pieces of wood imbedded in the ordinary roads, so as to form wheel-tracks for facilitating the motion of carts and wagons, were introduced into the English mining districts in the 17th century; in the succeeding century these were gradually superseded by the plateraliway or tram-road; and edge-rails were introduced in 1801. Shortly afterwards the moveable steam-engine began to be employed instead of animal power for locomotion; but its powers were long very imperfectly developed; and railways continued in little use except for the conveyance of mineral produce to the place of shipment. the place of shipment.

The epoch of the modern railway system is fixed at 1814, when George Stephenson invented the steam blast, the life-blood of the locomotive engine, and which increased its speed from 3 to 6 miles per hour. But the capabilities of a railway for the conveyance of passengers as well as merchandise, though indicated by the Stockton and Darlington Railway, 1825, were not fully established until 1829, shortly before the opening of the Liverpool and Manchester line, when a premium

of £500, offered by the directors of this railway for the best steam-lecomotive, was, after a keen competition among the most distinguished engineers, awarded to Robert Stephenson, the proprietor of the "Rocket," which, though weighing with tender only 7½ tons, drew 44 tons gross at 14 miles per hour. This was mainly effected by tubing the boiler,—an improvement which increased the evaporating power to three times that of the older engines, with 40 per cent. less communition of fuel. The result was, that, though the principal inducement to establish the railway had been the traffic in goods, this was so far exceeded by the prefit from passengers, that the company were enabled to meet great extra charges, and to divide regularly 10 per cent. annually upon their capital, although the outlay on the work was more than double the original estimate.

The signal success of this undertaking communicated a prodigious impulse to the railway system, not only in the United Kingdom but on the Continent and in America. In England, the leader in this "iron revolution," lines were speedily America. In England, the leader in this "from revolution," mass were speedify projected between all the great towns; improvements were made in the modes of constructing the road and laying down the rails; and the evaporating power of the engine was increased by enlarging the boiler and adding to the number of tubes, which, instead of 24 as at first, are now from 90 to 150 and upwards, exposing from 400 to 600 square feet of heated metal to the water, in addition to the area of the fire-box. The average speed of the passenger trains is about 30 miles an hour; but Marshal Soult, when in England, was carried at the rate of 60 miles: and the progress of improvement is such, that no limit can be placed to the rapidity, ease, and cheapness of conveyance by these splendid creations.

FORMATION OF BRITISH RAILWAYS, STATISTICS, &c.

The British railways for general traffic have been all formed by joint-stock companies, acting under the sanction of parliament. Respectable projects commonly emanate from a few individuals interested in the line proposed; though the mass of original proprietors are almost always speculative adventurers. In carrying out the measure, directors of business-like habits and local influence are appointed, who allot themselves into sub-committees to look after the traffic, the surreying, the share-list, and the canvassing slong the line, according to their qualifications. Having ascer-

measure, directors of business-like habits and local influence are appointed, who allot themselves into sub-committees to look after the traffic, the surveying, the share-list, and the canvassing along the line, according to their qualifications. Having ascertained that there are no engineering difficulties of a marked character between the two termini, the next stage, if the share-list be found to fill, is to estimate the probable income. This is done by computing the amount of passengers, carriages, and goods passing at particular places on the line, and calculating the probable increase of this "direct traffic" from the cheapness and quickness of the railway, as well as the "contingent traffic" from other places, whence travellers and goods can be carried more advantageously by the proposed railway than wholly by a direct conveyance. In such computations some assistance may be derived from the progress of other undertakings; still, great discrimination will be necessary, as the increase of passengers—the main contributors to a railway—has, according to Mr Lecount, been in all proportions up to 80 to 1.

Meanwhile, the engineer will be engaged in the surveying and levelling. And in most cases a practised man will be able at once to decide upon the principal points of the course, as well with reference to the maximum of traffic, as the avoiding of curves, costly purchases, and expensive operations. As a general rule, a perfectly straight and level line is to be preferred when the termini are of equal elsvation, or a uniform slope when one is higher than the other. But as it rarely happens that either of these can be obtained for any great distance without inconvenient and expensive deviations, the engineers adjusts his inclinations, or gradients, as to make the nearest practicable approach to a level; avoiding loss of engine power from undulations, by making all the inclinations on one side of the summit point rise towards it, and all on the opposite side descend from it. The retarding effect of elevations is

mowhere exceeded except in the extension from Camden Town to Euston Square. But the Liverpool and Manchester Railway, on the main line, has no gradient exceeding 1 in 849, except in two planes of about 1½ mile each, inclining 1 in 89 and 1 in 96, near Rainhill; nor has the Great Western, in a length of 11½ miles, a steeper gradient than 6½ feet per mile, or 1 in 812, except two inclined planes of 1 in 100; and on the Edinburgh and Glasgow line, the steepest is 1 in 880, with the exception of the inclined plane on approaching the latter city. Similarity in the gradients is essential to the economical working of a railway by inanimate power. If any inclination occur so steep that the ordinary power cannot ascend it by a reduction of speed, it must either be surmounted by the aid of auxiliary power, or the engine must run over other parts of the road with less than a maximum load, and consequently at an unnecessary expense.

the engine must run over other parts of the road with less than a maximum load, and consequently at an unnecessary expense.

While the engineer is engaged, the solicitor will have been feeling his way amongst the landholders and occupiers, so that refractory proprietors may if possible be avoided; and after a time he, the engineer, secretary, and directors, will throw all their information into one stock, and select that line which on the whole appears to be the best with reference to its gradients, geology, commercial importance, and the facilities it affords for constructing the works. These and all other preliminary matters require the greatest consideration, from the difficulty, delay, and expense of obtaining acts of parliament for railways, more especially under the present standing orders, which require the plans to be deposited with the Clerks of the Peace by March 1, and in the Private Bill-Office by April 1, in the year preceding that in which the application to parliament is made,—thus allowing a whole year (instead of 6 months as before 1837) for interested parties to consider the scheme, and prepare for opposing or advocating it. A general account of the existing reguand prepare for opposing or advocating it. A general account of the existing regulations will be found under COMPANY. Besides other powers, the Railway Act usually grants authority to borrow an additional sum, equal to one-third of the share-capital, if necessary.

usually grants authority to borrow an additional sum, equal to one-third of the share-capital, if necessary.

The act being obtained, the land required is set out and purchased. Where exorbitant compensation is required, recourse is had to a jury, who commonly award a sum much less than that claimed. The excavations, embankments, tunnelling, and masonry for bridges, viaduots, and other erections, are then let to contractors; arranging if possible so that each will be enabled to use all his excavations in his embankments. The "formation level" being thus completed, is spread over with a stratum of broken stone or "ballast," on which firm dry foundation are placed the blocks or sleepers to which the rails are fastened; and the intervening spaces are afterwards filled up with the same material. The ordinary standard width of the rail-tracks, both in Britain and the United States, is 4 feet 3½ inches; but a few in this country are nearly 6 feet; and the gauge of the Great Western was fixed by Mr Brunel at 7 feet, in order to allow scope for improvements in power, speed, stability, and convenience; but this is generally considered to be beyond the most advantageous width. The distance between the tracks is of inferior consequence.

The expense of constructing English railways, all with double tracks, has varied

advantageous width. The distance between the tracks is of inferior consequence. The expense of constructing English railways, all with double tracks, has varied under different circumstances from £10,000 to £50,000 per mile. The annual charges are also extremely variable,—railway expenses being indeed as yet but imperfectly understood. But the experience of several undertakings in this country and in Belgium coincide pretty closely in showing the average proportion of the annual receipts to the annual expenditure to be nearly as 2 to 1. It will be seen from the subjoined table, that in general long lines have been the most profitable. In the United Kingdom about 3000 miles of railway have been sanctioned by acts of parliament; upwards of two-thirds of which are intended for the conveyance of passengers and goods by steam-power; and of these last nearly 1300 miles are in operation. The amount of capital invested in these undertakings may be stated at from £60,000,000 to £70,000,000.

In the United States about 3500 miles were in operation in 1840; and the average expense of their formation was only about £5000 per mile, arising partly from the cheapness of land and timber, and partly from their being in great part only single tracks, and in other respects of inferior construction. Comprehensive railway systems have been formed by the governments of Belgium and France. Im-

way systems have been formed by the governments of Belgium and France. Important lines are also in progress in Germany, Austria, and Italy. And they have been introduced into Russia, Canada, Cuba, Egypt, and other parts,—the engineers being frequently, and the rails and locomotives generally, from England.

The following table shows the amount expended on the principal Railways in the United Kingdom, their weekly receipts, and other particulars, as in Sept. 1842:—

	Year Opened.	Longth Opened.	Amount Expended.	Paid per Share.	Price of Share.	Divi- dend per Cent.	Workly Resripts.
			£	£ 25	£	£	£
1 Arbroath and Forfar	1839	15	136,705	25	22	34	194
2 Birmingham and Derby Junction	1839	481	1,113,481	100	40	11	1,570
3 Birmingham and Gloucester	3840	55	1,438,370	100	40	1 1	2,121
4 Brandling Junction	1839	25	434,894	50	ŀ	43	819
5 Chester and Birkenhead	1840	14}	456,663	50	20	2	626
6 Dublin and Kingstown	1834	6	340,262	100		5	1,034
7 Dundee and Arbroath	1840	164	143,552	25	18	5	274
8 Eastern Counties	1840	174	2,104,054	23	8	2	1,170
9 Edinburgh and Glasgow	1842	46	1,383,077	50	48	5	1,998
10 Glasgow, Paisley, and Ayr	1840	40	930,435	80	34	31	1,134
11 Glasgow, Paisley, and Greenock	1841	22	709,116	25	18	1	922
19 Grand Junction	1837	834	2,280,590	100		10	7,887
13 Great North of England	1841	45	1,201,670	100	58	24	1,433
14 Great Western	1840	1814	6,435,671	65	821	6	14,661
15 Hayle		18	125,000	100		1	175
16 Hull and Selby	1840	31	634,994	50		3	1,100
17 Lancaster and Preston	1840	201	435,399	47		_3	
18 Liverpool and Manchester	1830	31	1,515,255	100	182	10	4,582
19 London and Birmingham	1838	1121	5,867,504	90	183	10	18,062
20 London and Blackwall	1840	31	1,141,538	168	7		927
21 London and Brighton	1840	56	2,473,379	80	34	2	4,499
22 London and Croydon	1839	10	618,748	13	10	1 .	343
23 London and Greenwich	1838	34	966,239	194	44	710	739
24 London and South-Western	1840	921	2,565,531	381	58	710	7,133
25 Manchester and Birmingham	1840	31	1,762,931	40	201	ا ا	2,647
26 Manchester and Bolton	1838	10	777,986	93		346	561
27 Manchester and Leeds	1841	50	2,913,110	.70	۱	51	5,121
28 Midland Counties	1840	57	1,679,959	100	61	3	3,206
29 Newcastle and Carlisle	1839	6]		100	ŀ	6	1,695
30 Newcastle and North Shields	1839	7.	232,077	45		6	376
31 North Midland	1840	721	3,297,704	100	57	2	5,705
32 North Union	1838	23	612,829	75	l .	69	1,346
33 Northern and Eastern	1840	351	758,653	4.5	1	44	1,300
34 Preston and Wyre	1840	19	317,695	50		•	331
35 Sheffield and Manchester		.7	404,656	821		1	302
36 South Rastern	1041	47	1,075,468	50	213		1,518
37 Taff Vale	1841	30	539,723	100	l	3	554
38 Ulster	1839	24	314,309	25		34	396
39 York and North Midland	1840	27	631,941	50	90	10	1,845

A duty of \$\frac{1}{2}d\$, per mile per passenger was formerly exacted on British railways; but, since August 1842, it has been levied at the rate of 5 per cent. on the gross receipts from this source (5 & 6 Vict. c. 79). The Board of Trade is vested with a controlling power over these works by the acts 3 & 4 Vict. c. 97, and 5 & 6 Vict. c. 55, which likewise contain numerous regulations for their management.

Further information on the subject of this article will be found in the "Practical Tractical" of Mycod and Liestenst Learning.

Further information on the subject of this article will be found in the "Practical Treatises" of Mr Wood and Lieutenant Lecount. 8

RAISINS (Fr. Raisins secs ou passés. Ger. Rosinen. It. Uve passe. Por. Passas. Rus. Issum. Sp. Passas), dried grapes. They are distinguished by the places where produced or exported,—as Malaga, Valencia, and Smyrna; or from the variety of grape or mode of preparation,—as muscatels, blooms, sultanas, lexias, and raisins of the sun. The latter are dried by solar heat alone; inferior kinds are dried in overs: but the most common way is to din the grapes in a hot livivium of and raisins of the sun. The latter are dried by solar heat alone; inferior kinds are dried in ovens; but the most common way is to dip the grapes in a hot lixivium of water and wood ashes (those of the vine branches or tendrils being preferred) and a little clive-oil, and afterwards expose them to the sun. In the ley used for the Valencia lexias, a little slacked lime is also used. The finest in quality are the Malaga muscatels; the lowest the black Smyrna raisins. About 200,000 cwts. are annually entered for home consumption in the United Kingdom; of which about \$\frac{1}{2}\$ths are imported from Spain, and \$\frac{1}{2}\$th from Turkey,—the latter being shipped entirely at Chesmé and Vourla, near Smyrna, except the sultanas, a small fine species expected from Smyrna itself. ported from Smyrna itself. 8

The drum of raisins is about \$4 lbs. The cask of Malaga, 1 cwt.; of Turkey, \$\frac{1}{2}\$ cwts. The box of Malaga, \$2 lbs.; of Valencia, 56 lbs.

RAPESEED (Dan. Roefrö. Fr. Graine denavette. Ger. Rapsaat) is the produce of a hardy biennial plant of the cabbage tribe (Brassica napus), extensively

cultivated on the Continent. It is chiefly valued for the oil which is extracted from it by grinding and pressure; and from 600,000 to 1,000,000 bushels are annually imported for consumption in the United Kingdom—principally from Denmark, though to some extent also from Germany and Russia. [OIL.] In Essex, Lincoln, and Cambridge, rape is reared for its stems and leaves, which are used in feeding sheep.

RAPESEED CAKE is employed, like linseed cake, on the Continent to feed cattle and pigs; considerable quantities of it are likewise brought to this country to be used as manure.

used as manure.

RASPBERRY, the fruit of the Rubus Idasus, a native of Britain and other parts of Europe, extensively used by the cook and the confectioner, also in the preparation of cordial spiritous liquors.

RATAFIA, a spiritous compound of fruit kernels, spices, and brandy.

RATTANS, on CANES, are gigantic reeds, the produce of different species of palms (Calamus ratang, &c.), principally found on the Malay peninsula and archipelago, where they grow in the forests, climbing over trees to a greater extent than any other known plants. They are to be chosen long, well glazed, of a bright yellow colour, of a small size, and not brittle. They are generally sold in bundles, each containing 100. About 10 000 returns are averally imported into this each containing 100. About 10,000.000 rattans are armually imported into this

each containing 100. About 10,000.000 rattans are armually imported into this country, where they are chiefly valued for the hard coating of their stems, which are split into strips, and manufactured into chair-bottoms and similar articles. REAL, a Spanish coin in vellon = 2½d.; also a money of account = 4½d. REALGAR, a red sulphuret of arsenic; brittle, inodorous, tasteless, and insoluble in water. Sp. gr. 3'34. It is found in Bohemia and Saxony, and is used as a colouring substance, as well as in pyrotechnical compounds. RE-ASSURANCE, a contract by which an insurer is protected by other underwriters against the risks he has undertaken.

REBATE OR RABAT, a per centage deduction from a stipulated price. RECEIPT OR ACQUITTANCE, a document acknowledging that he who signs it has received a sum of money or any other subject of claim, and releasing the party to whom the acquittance is granted. A receipt for money is strong evidence of its having been paid, but is not incontrovertibly conclusive; leaving it open to proof by the granter that the money has not been received, or that he granted the rehaving been paid, but is not incontrovertibly conclusive; leaving it open to proof by the granter that the money has not been received, or that he granted the receipt under misrepresentation. In England, an indorsement on a deed, of a receipt of a sum of money, is not conclusive, the deed itself in its contents not stating such receipt: and it may be shown that in fact the money was not paid. The indorsement, not being under seal, cannot amount to an estoppel, but can only be svidence for the jury, capable of being rebutted by other circumstances in the case (Philips on Evidence, 388-9). A general receipt or acquittance, "in full of all demands," is held in England to discharge all debts, except such as are on specialty, as bonds, bills, &c., which can only be met by some specialty of equal force, such as a general release. Receipts must be duly stamped, otherwise, by 23 Geo. III. c. 49, § 14, they cannot be received in evidence; and by 35 Geo. III. c. 55, § 8, all and every person or persons who shall write or sign, or cause to be written or signed, any receipt, &c., not duly stamped, forfeits £10, in case the sum discharged does not amount to £100; and £20, in case it amount to £100 and upwards. By § 9, any person stating a false sum in the receipt, dividing the sum into small portions, or otherwise attempting evasion, is liable in a penalty of £50. By § 11, if a receipt is brought to the Commissioners of Stamps, within fourteen days after its date or issue, it may be stamped on payment of £5 over and above the duty; if beyond fourteen days, and within one calendar month, on payment of £10 over and above the duty. By § 10, the commissioners are prohibited from stamping receipts otherwise than on these terms. By 43 Geo. III. c. 126, § 5, any person who has paid a sum of money which requires a receipt-stamp, may produce the proper stamped paper, and may require the receiver to grant a receipt in full of all demands," is liable, whatever be the amount of the transactions settled, to a duty of 10s. A receipt is a by the granter that the money has not been received, or that he granted the re-

acknowledgment of having received the acceptance of a bill of exchange in payment requires a receipt stamp. But the expressions "Mr T. has left in my hands," and "I have received a bill, &c., to recover," &c., not being given for or upon the payment of money, are held not to require stamps (Langdon e. Wilson, 2 Mos., & R., 10). A receipt for a given sum requires only a stamp to meet that amount, though it make mention of other sums. A written acknowledgment at the foot of an account, that such account its correct," may be given in evidence without being stamped. In 1853, by 16 & 17 Vict. c. 59, a uniform duty of 1d. was imposed on all receipts, and a like duty on drafts or orders payable to bearer on demand. RE-EXCHANGE, the price of a new exchange due on a protested bill. REGISTRATION—CLAUSE OF, in the law of Scotland, is a form of clause applicable to obligatory deeds, authorizing them to be recorded in the books of a court having jurisdiction to put the deed in force. When the deed is so registered in terms of the clause, it may be enforced as if it were a decree of the court.

REGISTRY OF SHIPS. Before a ship is ready for sea, the property of it is in the same situation as that of any other moveable; but whenever it becomes fitted for its proper purpose, all rights connected with it are, by a law extending over the whole of the British dominions, held under a system of custom-house registration; a compliance with the provisions of which is besides necessary to entitle a vessel to the privileges of a British ship under the navigation laws. The registry of ships was introduced into this country by the Navigation Act of 1660. [NAvigation Lawa.] It was afterwards the subject of various acts; and at length the whole were consolidated and reduced to a system. The existing regulations are embodied in a statute passed to the provisions of which its befole wing is a very full shetzet: whole were consolidated and reduced to a system. The existing regulations are embodied in a statute passed in 1833, of which the following is a very full abstract:— Abridgment of an Act for the Registering of British Vessels, viz. 3 & 4 Wm. IV. c. 55, with the Alterations of the Act 1 & 2 Vict. c. 113.

§ 1. Act 6 Geo. IV. c. 110, and succeeding acts possible to the first provided to the first provided to the first provided to the privileges of a pricial-registered ship, unless it have been spistered ship, unless it have been spistered in virtue of the act 4 Geo. IV. c. feltures.

§ 1. Act 6 Geo. IV. c. 110, and succeeding acts consolidated.

Certificate and General Regulations, § 2. No vessel is entitled to any of the privileges of a British-registered ship, unless it have been registered in virtue of the act 4 Geo. IV. c. 41, or the act 6 Geo. IV. c. 110, or the registered in virtue of the act 4 Geo. IV. c. 41, or the act 6 Geo. IV. c. 110, or the registered in terms of this act, and a certificate of registry be obtained in the statutory form. § 3. The following are the persons authorised to make registry and grant certificates for vessels in their respective places: —The collector and comptroller of the customs in any port in the United Kingdom, and in the Isle of Man, respectively: The principal officers of the customs in Guerrasey or Jersey, together with the governor, lieutenant-governor, or commander-in-chief of those lalands, respectively: The collector decomptroller of any port in the British possessions in Asia, Africa, and America, or the collector where there is no comptroller: The collector of duties at any port in the territories under the government of the East India Company, within the limits of the East India Company, within the limits of the East India Company, within the limits of the East India Company, within the limits of the East India Company, within the limits of the care the content of the extra the collector at any British possession within the axid limits, together with the governor, lieutenant-governor, or commander-in-chief of Maits, Gibraltar, or Heigoland, and Cape of Good Hope, a collector having been appointed, 1 & 2 Vict. c. 113, § 15]. No vessel can be registered at Halta, Gibraltar, or Heigoland, are not entitled to the privileges of British ahips in any trade between the United Kingdom and any of the British possessions in America. Wherever the ast makes provisions as toend to all the above-named officials in their respective circum-stances; and all provisions as tend to all the above-named officials in their respective circum-stances; and all provis makes provision as to collectors and comptrollers of the customs, the provisions extend to all the above-named officials in their respective circumstances; and all provisions as to commissiones:

3. Any registered vessel, declared to be stances; and all provisions as to commissiones:

5. Any registered vessel, declared to be stances; and all provisions as to commissiones:

6. The customs apply to the governor, lieutenant
7. The commissiones are commissiones.

ing obtained certificate, exercising any of the privileges of a British ship, are liable to forfeiture.

§ 5. No ship can be duly registered by virtue of this act, except such as are wholly of the build of the United Kingdom, or of the late of Man, or of Guernsey or Jersey, or of some of the colonies, plantations, or territories in Ania, Africa, or America, or of Makta, Gibraitar, or Heligoland, or such as may have been condemned as prizes, or for breach of the laws for the prevention of the slave-trade, and which wholly belong to British subjects.

§ 6. Mediterranean Pass (now in disuse) may be sensed at Gibraitar and Malta for certain ships belonging to these places.

§ 7. No vessel can retain the privileges of a British ship after having been repaired in a foreign country, if the repairs exceed the sum of 30s. for every ton of the burden, unless they have been necessary by reason of extraordinary damage sustained during absence from the British dominions, to enable her to perform her voyage, and to return to some place in the said dominions; and whenever any vessel so repaired in a foreign country arrives at any port in the British dominions as a British-registered ship or vessel, the master or other person having the charge must, upon the first entry, report to the collector and comptroller that the vessel has been so repaired, under penalty of 30s per ton; and if it be proved to the satisfaction of the Commissioners of the Customs that such vessel was seaworthy at the time when she last departed from any place in the British dominions, and that no greater repairs have been done than were necessary, they may, upon full consideration of circumstances, direct the collector and comptroller to certify on the certificate that it has been proved to the satisfaction of the commissioners that the privileges have not been forfeited, not withstanding the repairs.

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owners, and for such reasons sold by order of a count for the benefit of the owners or others, is desend a vessel lost or broken up within the meaning of the sort, and can nover again be suited to the privileges.

§ 8. No Hritish ship becoming prize to an entry of the forest than the state of the privileges.

§ 10. No registry can be made in any other plants in the proper of the sum has been supported to the privileges.

§ 10. No registry can be made in any other great of the sum that the which such weals belongs (accept of vessels condemmed as prises in Guernays, Jersey, or Man, which must be registred as pointed out below); and any registry in the proper officers be specially authorised to make such registry in any other port by order of the commissioners. At every prof to registry, book must be kept by the collector and comprised form of the certificate is to be commissioners. At every registry must be numbered in progression, before registry, resides, and when such owner coveres transmit.

§ 11. Every vessel is deemed to belong to some portation reas which somets, or one, of the owner, before registry, resides, and when such owner coveres which such the other belongs, or from any other port by the set, and subscribe the declaration of the principal owners, bearing that the port to which alse then belongs, or from any downer or owners that the such that the serious of the proper officers and comprising the declaration, or the sense colony, plantation, island, or the sum to be registered de sowe before saling from the port to which alse then belongs to sense the support of the commission of the principal owners, bearing that the part of the worse, or in their portation of the principal owners, bearing the declaration, or the same colony, plantation, island, or the same colony, plantation, island, or the part of the worse of the vessel may then be, may certify upon the back of the existing certificates, that the same is to remain in force for the visit of the proper officers of the vessel may then be, may be t

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within seven days after the transfer, be delivered up to the persons authorized to make registry and grant certificate of registry at the place; and that if the vessel be in any foreign port when such transfer takes place, the certificate shall be delivered to the nearest British consul or other chief British officer, or that if the vessel be at see when such transfer takes place, the certificate shall be delivered to the nearest British consul or other chief British officer at the first foreign port at which he arrives, immediately on arrival, or, if he arrives a tmp port of the British domainions, to the proper officer, within fourteen days after arrival. If it happen that at the time of registry the vessel be at any other port than that to which she belongs, so that the master cannot attend to join with the owners in the bond, he may give a separate bond at the port where the vessel may then be, to be transmitted to the proper officers, at the port where the change and give notice to the proper officer, at the port where the change, and give notice to the proper officer of registration, who makes a memorandum in the book of registers, and gives notice thereof to the commissioners. The new master must give bond as above, before his name is indorsed.

22. The bonds are liable to the same stamp

dorsed.
§ 32. The bonds are liable to the same stamp as bonds given for the duties of customs.
§ 23. Any person detaining the certificate con-trary to the conditions of the bond, is liable to

s bonds given for the duties of customs.

§ 23. Any person detaining the certificate contrary to the conditions of the bond, is liable to the penalities in the bond.

**Mame of Vessel, § 24. No name can be given to a vessel other than that by which she was first registered; and before a vessel, after registry, begins to take in any cargo, the name, as registered, and her port, must be painted, in white or yellow letters, of a length of not less than four inches, upon a black ground, on some conspicuous part of the stern, in a distinct and legible manner, and must be so kept and preserved; and if the owner or master, or other person in charge, permit the vessel to begin to take in any cargo before the name has been so painted, or wilfully alter, erase, obliterate, or conceal, or permit the same to be done (unless in the case of square-registry devices) in time of war), or in any document to be described, by any other name to any revenue officer, he forfeits £100.

**Builder's Cortificate, § 28. Every person applying for a certificate is required to produce a full account, under the hand of the builder of the proper denomination, and of the time when and the place where the vessel was built, and an exact account of the tonnage, together with the name of the first purchaser (which account the builder is required to give under his hand on demand), and to subscribe a declaration that the vessel for which the certificate is required is the same with that described by the builder.

[By I & 2 Vict. c. 113, § 11, where the builder or miskald, and proof thereof be made to the assisfaction of the commissioners may take any other satisfactory evidence.]

**Lost Certificate, § 28. Every person applying for a certificate to be granted in the certificate is required to give under his hand on demandly, and to subscribe a declaration that the vessel for which the certificate is required in the cartificate of the lunder of the proper denomination, and of the time when and the place where the vessel was believed to be granted pro

commissioners in such sum as they may require, that if the certificate be afterwards found, it shall be delivered to the proper officers, and that no illegal use has been or shall be made thereof with his or their privity. Before such license is granted, the master must subscribe a dectaration that the vessel has been registered, naming the port and the time, and all the particulars in the certificate, to the best of his knowledge and belief, and must give such bond and with the same condition as is before mentioned. Before a license is granted, the vessel must be surveyed; and the certificate of survey must be preserved by the collector and comptroller of the port to which she belongs; and in virtue of it the commissioners may permit the vessel to be registered after her departure, whenever the owners personally attend to subscribe the declaration, and comply with the other requisites of the act, except so far as relates to the bond by the master. The certificate of registry may then be transmitted to the collector and comptroller of any other port, to be given to the master on his giving bond and delivering up the license.

Detaining Certificate, § 37. When a person keeps a ship's certificate in his possession contrary to this act, and refuses to deliver it up to the proper officers of the outsoms, or the master or owners, complaint may be made on eath to any justice residing near the place in Great Britain or Ireland, or to any member of the supreme court of justice or any justice of the pace in any of the peacesions abroad, who must grant warrant to cause the person complained against to be brought before him; and if it appear, on examination or otherwise, that the certificate is not lost or mistaid, but is wilfully detained, such person shall foriet £100, and on failure of payment must be committed for not less than three nor more than twelve months. On the magistrate certifying the conviction, registry and certificate may be granted of new, there being indorsed on the latter the ground upon which the ship

tificate, or the principal contents thereof, and a transfer of any other kind is not valid or effectual for any purpose whatever; but no bill or sale is deemed void by reason of any error in the recital, or by the recital of any former certificate instead of the axisting one, provided the identity of the vessel be effectually proved thereby.

§ 32. The property in every vessel, of which there are more owners than one, is considered as divided into 64 shares, and the proportion held by each must be described as being a certain number of 64th parts or share; and no person is entitled to he registered as an owner in respect of any proportion which is not a 64th part or share; and, upon the first registry of any owner cannot be reduced into any number of 64th shares, the owners of fractional parts may read the same shall be so registered accordingly. If it at any time happen that the property of any owner cannot be reduced into any number of 64th shares, the owners of fractional parts may read any owner, by memorandum upon their respective bills of sale, or by fresh bill of sale, without such transfer being liable to stamp-duty. The right of any owner to any fractional parts is not to be affected by reason of it not having been registered. Any number of owners, named and described in the registry, being partners in not to be affected by reason of it not having been registered. Any number of each; and the sume shall be one recitations of the time of the conjector and comptroller must indorse upon the certificate the collector and comptroller must indorse upon the certificate the collector and comptroller must indorse upon the certificate the collector and comptroller must indorse upon the certificate the collector and comptroller must indorse upon the certificate the collector and comptroller must indorse upon the certificate the collector and comptroller must indorse upon the certificate the collector and comptroller must indorse upon the certificate to the property so held is in every respect partnership property.

partnership, as joint-owners, without distinguishing the proportions to treest of each; and the property so held is in every respect partnership property.

§ 33. No more than thirty-two persons are entitled to be owners at the same time of any west, as tenants in common, or to be registered as such; but this does not affect the equitable title of minors, heirs, legatese, creditors, or others, exceeding that number, duly represented by or holding from any of the persons within the said number, registered as legal owners; and if it be proved to the satisfaction of the commissioners that any number of persons have associated themselves as a joint-stock company, for the purpose of owning as joint-stock company, for the purpose of owning as joint-property, and that they have appointed any number, not less than three, of their members to be trustees of such property, the trustees, or any three of them, with permission of the commissioners, may subscribe the declaration before registry, instead of the names and descriptions of the other owners, stating those of the company.

§ 34. No bill of sale or other instrument is effectual to affect any vessel, until produced to the collector and comptroller of the port of registry, or of any other port at which she is about to be registered de novo, nor until they have entered in the book of registry de novo, after all the requisites for such registry de novo, after all the requisites for such registry de novo, after all the requisites for such registry de novo, after all the requisites for such registry de novo, after all the requisites for such registry de novo, after all the requisites for such registry de novo, after all the requisites for such registry de novo, after all the requisites for such registry de novo, after all the requisites for such registry de novo, after all the requisites for such registry de novo, after all the requisites for such registry de novo, after all the requisites for such registry de novo, after all the requisites for such registry in the one cas

A B, Collector.
C D, Comptroller."

If desired so to do, and if the instrument be pro-

or the arrival, before another entry; and in every case where there at any time happen to be two or more transfers by the same owner of the same property in any vessel entered, the collector and comptroller must indorse upon the certificate the particulars of that bill of sale, &c., under which the person claims who shall produce the certificate for that purpose within thirty days after the entry of his bill of sale, or within thirty days after the return of the vessel to her port, in case of her absence; and in case no person produces the certificate within the period, the collector and comptroller must indorse to such person as may first produce the certificate for that purpose, it being the intent of the act that the several purchasers and mortgages have priority, not according to the entries of the bills of sale, &c., but according to the time of the indorsement on the certificate. Provided that, if the certificate le lost, mislaid, or detained, so that the indorsement cannot in due time be made, and proof thereof be made by the purchaser or mortgage, or his known agent, to the satisfaction of the commissioners, they may grant such further time as may appear necessary for its recovery, or for registry de nose, and thereupon make a memorandum in the book of registrys of the further time so granted, and during such time no other bill of sale shall be entered for the transfer of the same security.

§ 37. If the certificate of registry be produced to the collector and comptroller of any port where the vessel may be, togesher with a bill of sale, containing a notification of record, by the collector and comptroller of any port where the vessel helongs, they may indorse on it the transfer of the port to which the vessel belongs, receiving notice, shall record the same, inserting the name of the port at which the indorsement was made. But the collector and comptroller of any port where the vessel belongs, who must give them information, whether any and what other bills of sale have been recorded; and the collector

ceed as they would do if the port were that to twhich the vessel belongs.

§ 38. If it become necessary to register any vessel de novo, and any share have been sold since she was last registered, without the transfer being recorded and indorsed, the bill of sale must be produced to the collector and comprtoller, who are to make registry, otherwise the sale cannot be noticed in such registry de novo; but, upon the future production of the bill of sale, and the existing certificate, the transfer may be recorded and indorsed as well after registry de noses as hedge.

§ 39. If upon any change of property in a vessel the owners desire to have her registered de newo, although not required by the act, and the propert number attend at the custom-house at the port to which she belongs, the collector and comptroller may make such registry, and grant certificate under the above regulations.

§ 40. Every collector and comptroller is bound, upon reasonable request by amyperson or persons, to produce for impection any oath, the declaration, or register, required by the act relative to any register, required by the act relative to any register, required by the act relative to any person out of the kingdom, he sold in his absence by his known agent or correspondent, under his directions expressed or implied, and acting for his interest, the agent exceeding a bill of sale, without having received a legal power to do so, the commissioners, upon application made to them, and proof of the fair dealings of the parties, may persuit the transfer to be registered, or to be recorded and indorsed, as the case may be, as if legal power had been produced; and if it happen that a hill of sale cannot be proved that a bill of sale cannot be proved that a bill of sale had been rescuted, and registry de sove shall have become necessary, the commissioners, upon proof of the fair dealings of the parties, may persuit the vessel to be registered de newe, as if a bill of sale had been produced; and if it happen that a hill of sale had been rescuted, and registry de sove shall have become necessary, the commissioners, upon proof of the fair dealings of the parties, may persuit the transfer to be registered de newe, as if a bill of sale had been produced; and if it happen that a hill of sale had been executed, and registry de sove shall have been any succeed to the proved that a bill of sale had been produced; the proved of the parties, it cannot be proved that a bill of sale had been executed, and registry de sove shall have the second of the proved that a bill of sale had been executed, and registry de sove

§ 42. When any transfer is made only as a security, either by way of mortgage or of assignment to trustees for the purpose of sale for payment of a debt, the collector and comptroller of the port of registry must, in the entry, and in the indorsement on the certificate, express that she transfer was made only in security by way of

fied to him; and such governor in required to transmit to one of the sceretaries of state an authenticated copy of the proceedings, with his reasons for causing them to be stayed, and such documents (properly verified) as he may judge necessary for the information of his majesty.

§ 48. Persons making declarations, or counterfeiting, emaing, altering, or falsifying any writings required by the act, or withily using falsified documents, or wiffully granting any certificate or other instrument, knowing it to be false, forfeit £100.

§ 46. Penalities and Forfathures are recovered and disposed of in the same manner as those incurred by the Custom-House Regulations.

[By 1 & 2 Vict. c. 113, § 19-14, if a British vessel he lost, or by change of property. Acc, ceases to be a British vessel, the owners must immediately, on their becoming acquainted therewith, give notice to the collector and comptroller at the port of registry. When a British vessel has been absent from her providers and comptroller at the port of registry. When a British vessel has been absent from her providers, they must give notice stating the same of absence, Failure to comply, or falsehood, renders the party liable to a penalty of £5.]

the transfer was made only in security by way of REGRATING, buying and selling again commodities in the same market. RENTE, in the French funds, is a term synonymous with annuity. RESERVE, in Banking, the portion of capital kept to meet current demands. RESINS, a class of inflammable substances, of vegetable origin, of which common rosis furnishes an example. They are solid, brittle, of a certain degree of transparency, and a colour commonly inclining to yellow. When pure, they are soluble in alcohol and in oils, but not in water, in which respect they differ from gums. They are more or less acted upon by the alkalies. The most important are Rosin, Mastich, Sandarach, Elemi, Tacamahae, Animi, Labdanum, Copal, and Lac, which are described under their respective heads. [Gums.]

RESPONDENTIA is a contract by which money is raised on the chance of the safe arrival of a ship's cargo, in the same manner as on the safe arrival of the

safe arrival of a ship's cargo, in the same manner as on the safe arrival of the vessel, in Bottomry. It is to be used in the same emergencies, and gives the creditor the same recourse against the borrower. There is no hypothec over the cargo, as there is over the vessel in the case of Bottomry, and hence the security is merely personal. [Borromey.]
REST, a term sometimes used in Banking to denote the undivided profits remain-

ing at the period of balancing. It also expresses the period of balancing.

REVENUE AND EXPENDITURE, PUBLIC. The public revenue in this country, as in most other parts of Europe, originally consisted of the rents of crown lands, and of sums levied from the subject simply by the exercise of the royal prerogative. After the Conquest, the practice was introduced of the barons and military tenants of the crown, assembled in "Great Council," making grants in pressing emergencies, which were raised by taxes; and this practice was extended

when representatives of the commons were admitted to parliament in the 13th when representatives of the commons were admitted to parliament in the 18th century; more especially after the crown estates became reduced by alienations But still, down to the end of the reign of Elizabeth, by far the larger portion of the revenues was derived from sources over which parliament retained no control. Thus, the duties of tonnage and poundage [Cusroms] were usually conferred upon each sovereign at his accession for life. And, from these and other sources equally permanent and independent, Elizabeth, although the grants to her averaged not more than £70,000 a-year, enjoyed a revenue of about £500,000; which was also expended without any check from sither house. without any check from either house.

Nearly the same system was continued under James I. But a change took place in the reign of Charles I., whose lofty opinion of the prerogative led him, though refused the duties of tonnage and poundage at his accession, to levy these, a new tax called ship-money, and other exactions, without the sanction of the legislature. The differences between the king and parliament ended in a rupture in 1641, before which the public revenue amounted to nearly £900,000. A period of transition then occurred from the ancient to the modern system. During the Commonwealth, the excise and post-office were established, and other financial innovations introduced; most of which were continued after the restoration of Chales II., in whose duced; most of which were continued after the restoration of charles 11., in whose reign stamp-duties were first levied. A return was made to absolute principles during the last years of Charles; and still more after the accession of James II. But an entire revolution took place on the abdication of the latter, and the succession of William and Mary in 1638, when the exaction of money from the subject by the exercise of the prerogative ceased; and all taxes were afterwards imposed by the authority of parliament. The customs, or the duties upon exports and imports, and the excise-duties—those upon the manufacture or consumption of commodities are the second that the control of commodities are the second the great sources of the public revenue. Considerable additions

authority of parliament. The customs, or the duties upon exports and imports, and the excise-duties—those upon the manufacture or consumption of commodities—now became the great sources of the public revenue. Considerable additions to these branches were made during King William's reign; and the system of borrowing and funding money was introduced. In 1701, the year preceding his death, the revenue amounted to £3,895,205; of which the customs produced £1,539,100; the excise, £986,004; and the land-tax, of 2s. per pound, £989,965. The total amount raised by taxes and loans during his reign (1669-1702), of which 9 were years of war, was about £72,000,000.

In the 124 years of Anne (1702-1714), of which 11 were years of war, the total revenue raised by taxation was about £62,000,000, and by loans nearly £60,000,000. In the 13 years' reign of George I. (1714-1727), the amount raised by taxes was £77,000,000, and by loans nearly £3,000,000; but again £5,000,000 debt were paid off. In 1727, when this king died, the produce of the taxes was £6,762,643; of which the customs yielded £1,530,361; the excise, £1,927,354; and the land-tax, at 4s. a-pound, £2,000,000. In the 33 years' reign of George II. (1727-1700), of which 15 were years of war, the amount raised by taxes was £217,000,000, and by loans about £60,000,000. In the latter part of this reign the revenue increased considerably, principally through the extension of the excise system; and in 1759 it amounted to £3,523,540; of which £1,985,376 were derived from customs, and £3,887,349 from the excise.

The 59 years' reign of George III. (1760-1820), which witnessed so wonderful

it amounted to £3,523,540; of which £1,935,376 were derived from customs, and £3,887,349 from the excise.

The 59 years' reign of George III. (1760-1820), which witnessed so wonderful an augmentation both of the general wealth and of the government expenditure, commenced with a revenue from taxation of only £8,300,000. Nor, at the commencement of the American war, 1779, was it much beyond £10,000,000. At the peace of Versailles, 1783, it was nearly £12,000,000. In the 10 years of peace that followed, it made a very considerable advance, having, in 1793, when the war with France broke out, risen to nearly £20,000,000. But the extraordinary increase began from 1797, the year of the suspension of cash payments by the bank, when the produce was about £23,000,000. In1798, the year following, it rose to £31,000,000; and it went on regularly advancing till 1815, the last year of the war, when the amount of revenue, the produce of taxation, paid into the Exchequer, reached, after paying the expenses of collection, the enormous sum of £7.2,210,512. The loans raised in this eventful period were also on a gigantic scale: the amount derived from this source, including Exchequer bills, beyond the amount redeemed, in the 23 years from 1793 to 1815 inclusive, having been £432,707,263; and the aggregate amount of revenue and loans, raised for public uses in the same period, £1,498,461,819. The expenditure, including interest upon the debt, during the 10 years from 1806 to 1815 inclusive, averaged £84,067,761 per annum. In 1814, the current expenditure amounted to £76,780,895; and the interest upon the debt to £30,061,365, making together, £106,332,260, the largest annual outlay ever made; though that of the previous year, 1813, was £105,943,727, and of the year subsethough that of the previous year, 1813, was £105,943,727, and of the year subsethough that of the previous year, 1813, was £105,943,727, and of the year subsethough that of the previous year, 1813, was £105,943,727, and of the year subsethough that of the previous

quent, 1815, £92,280,180. Nothing at all approaching to these financial operations cours in the history of the world. (Porter's Progress of the Nation, § 4, c. 2).

A considerable reduction of taxation took place after the return of peace. In 1816, the reductions amounted to £17,547,365; mainly consisting of the property-tax, £14,318,573, and the war malt-duty, £2,792,000. Some addition was made to the taxes in 1819. But important abatements were again made in 1822, and still more in 1823, when the salt-duty and assessed taxes were reduced to the extent of £4,185,735. In 1824 and 1825, the customs on coals, silk, wine, tobacco, coffee, and a variety of other articles, were shated, and the remainder of the axcise on salt: of £4,185,785. In 1824 and 1825, the customs on coals, silk, wine, tobacco, coffee, and a variety of other articles, were abated, and the remainder of the excise on salt; the whole amounting to £5,500,000. In 1826, the duties on British spirits and other articles were reduced not less than £1,967,215. In 1830, the beer-duty was repealed, £3,055,000; also duties on sugar, hides, and skins. In 1831, the customs on sea-borne coals, printed cottons, and other articles, £1,588,052. In 1832, the excise on candles, £476,500; in 1833, the scap-duty and various assessed taxes, £1,500,000; in 1834, the duties on windows, Irish spirits, &c., £2,064,516; and in 1836, duties on paper, spirit licenses, &c., amounting to £1,021,786. No other important abatement took place until the introduction of the uniform penny postage in 1849; in which year, however, the loss of income from this source, and the increased expenditure consequent on the military operations in Canada, China and elsewhere led to the ture consequent on the military operations in Canada, China, and elsewhere, led to the addition (with certain exceptions) of b per cent. to the customs and excise duties, and of 10 per cent. on the assessed taxes. The total amount of taxes repealed, expired, or reduced, in the 27 years from 1815 to 1841 inclusive, was about £45,000,000; and of taxes imposed, £8,000,000; the excess of the former above the latter being thus £37,000,000.

The following table shows the revenue and expenditure (including charges of collection), the difference between them, and the taxes imposed and reduced in each of the 20 years to 1841; to which is added, for comparison, the average price of wheat according to the London Gazette, and the declared value of the exports of the

produce and manufactures of the United Kingdom.

Year.	Rovenue.	Expenditure.	Excess of		Tax	L00	Wheat	Value of
			Revenue.	Expenditure.	Imposed.	Repealed,	per gr.	Experts.
	£	£	£	£	£	£	s. d.	£
1822	59,823,724	55.079.316	4,744,408			2,139,101	43 3	36,968,964
1823	58,498, 157	54,197,411	4,300,748		18,596	4,185,735	51 9	35,458,048
1824	59,829,691	55,941,519	3,889,172	l l	49,605	1,801,333	62 0	40,396,30G
1825	57,945,105	54,895,949	3,049,156		48,100	3,676,239		38,877,388
1826	55,628,793	56,274,712		645,919	188,725	1,967,215	<i>5</i> 6 11	31,535,723
1827	55,510,145		• • • •	826,674	21,402	84,038	56 9	37,181,335
1828	57,391,235		3,246,994		1,966	51,998	60 5	36,812,756
1829	55,934,963	54,223,412	1,711,551	.,		126,406	66 3	35,842,623
1830	54,932,290	52,018,617	2,913,673		696,004	4,093,955	64 3	38,271,597
1831	51,012,608	51.711.465		698,857	627,588	1,623,536	66 4	37.164.372
1832	51,523,087	50.908.328	614,759		44,596	747,964	58 8	36,450,594
1833	50,679,397	49,166,314	1,513,083			1,596,914	59 11	39,687,347
1834	50,831,271		1,608,155		198,394	2,064,516		41.649.191
1835	50,408,579	48,787,638	1,620,941		5,575	165,877	39 4	47,372,270
1836	52,949,397	50.819.305	2,130,092		4.521	1,021,786	48 6	53,368,571
1837	50,663,353	51.319.113		655,760	100	234	55 10	42,070,744
1838	51,375,520	81.720.748		345,998	1,733	289	64 7	50,060,970
1839	51,927,495	53,440,287		1,512,792		63,258	70 9	63,233,580
1840	51,850,083	53,444,053		1,593,970	2,155,673	1,218,959	66 4	51,406,430
	52,363,949	54.465.318		2,101,369	_,,,,,,,,	27,170		51,634,623
	,,,	,,				-/,-/		

The deficiency for 1842 was computed by Sir Robert Peel, in March of that year, at £2,570,000; to meet which he proposed a tax of 7d. per £1 on all incomes in Britain exceeding £150, estimated to produce £3,700,000; the raising of the Irish stamp and spirit duties to the same rates as those of Britain, reckoned to bring £410,000; and an export duty on coals £200,000; total, £4,310,000; affording a surplus of £1,740,000, to be applied to a reduction of the timber duties and others, and to meet the expense of military operations in China and elsewhere. This plan, after a modification of the proposed duty on coals, was sanctioned by parliament. S

THE BUDGET, or annual exposition of the finances submitted to the House of Commons by the Chancellor of Exchequer, does not exhibit an articulate account of the revenue and expenditure, but merely a statement of the sums required to be voted for the public service, under the different heads of Navy, Army, Ordnance, and Miscollaneous Articles, together with any incidental charges which may apply to the very with the property of the public service. to the year, with the ways and means for meeting the same, -comprehending the

surplus of the Consolidated Fund, after defraying the charges upon it, the annual duties, and such incidental receipts as come in aid of the national resources.

The Consolidated Fund,* formed by Mr Pitt in 1786, at present embraces all the branches of the revenue except the annual sugar-duty. It is specially burdened with the interest and other payments on account of the national debt, the civil list, pensions, and other permanent grants by parliament. The surplus is always considerable; of late years about £14,000,000.

The Annual Duties comprehended formerly the malt and land tax, which, or constitutional principles, were reserved for special annual grants, as a restraint on

The Annual Duties comprehended formerly the malt and land tax, which, on constitutional principles, were reserved for special annual grants, as a restraint on the power of the crown. On the land-tax being rendered perpetual in 1798 [Land-Tax], certain duties on sugar and tobacco, and on offices, pensions, and salaries, were substituted in its place. Of late years, however, the only tax reserved for an annual grant is the sugar-duty, estimated usually at £3,000,000.

The application of the supplies of each session is regulated by the Appropriation Act (introduced as a restraint on the improvidence of Charles II.), which is passed after all the grants have been made, and usually indeed contains, along with the appropriation clauses, the authority for making the last payments out of the Exchequer.

In the event of the revenue proving insufficient for the expenditure, the deficiency

In the event of the revenue proving insufficient for the expenditure, the deficiency is temporarily supplied by means of exchequer bills; which are also issued in anticipation of the growing duties. [Funds. United Kingdom.]

REVERSIONS. [Annuty. Insurance on Lives. Interest, Compound.]

RHATANY ROOT, derived from the Krameria triandra, consists of cylindrical ramifications, varying in size from that of a quill to a finger. It is imported from Peru, and is used as an astringent medicine.

RHODIUM, a rare and extremely hard and durable metal, obtained by Dr Wollaston from platinum ore. Sp. gr. 11. Its scarcity is said to be the only bar to its extensive employment in the arts, as it forms valuable alloys with other metals, particularly steel.

RHUBARB (Fr. Rhubarbe. Ger. Rhabarber. It. Reobarbaro. Por. Ruiharba.

particularly steel.

RHUBARB (Fr. Rhubarbe. Ger. Rhabarber. It. Reobarbaro. Por. Ruibarbe. Rns. Revom. Chin. Ta-hwang), a medicinal root obtained from a plant (Rheum palmatum?) which inhabits the lofty mountains of Central Asia. Three kinds of it are distinguished—namely, Russian, Turkey, and Chinese or East Indian. The Russian rhubarb is the best, as very great attention, both in purchasing it at Kiachta from the Bucharians, and in transporting it from thence to Moscow and Petersburg, is paid by order of government, and the bad pieces are burned by an inspecting apothecary. It possesses a fine bright reddish or whitish yellow colour, and a strong fragrant smell; and is commonly in round pieces, often perforated with so large a hole that many have the appearance of a mere rind. Turkey rhubarb is derived from the same source as the Russian, but is generally darker and coarser, from less attention being paid to the trade. The Chinese or East Indian is heavier, harder, and more compact than the others; seldom perforated with holes, and is from less attention being paid to the trade. The Chinese or East Indian is heavier, harder, and more compact than the others; seldom perforated with holes, and is either in long pieces or with two flat sides, as if they had been compressed. The rhubarb imported into this country, with the exception of a small quantity from Russia, is derived almost exclusively from China. Nearly 50,000 lbs. are annually entered for home consumption. S

Hybrid Russars (Rheum hybridum) is a well-known plant, extensively cultivated in this country. On its layer exception that he are for the layer than th

vated in this country for its large succulent stalks, used in confectionary. RIBAND (Fr. Ruben de Soie. Ger. Band. It. Nastro di Seta. Sp. Cinta de Seda), a name given to silken bands of various widths and colours, much used by females for headdresses and other purposes. They are both plain and figured, and are sometimes distinguished into sarcenet, satin, &c., according to the manner in which sometimes distinguished into sareener, satin, c.c., according to the manner in which they are made. They are also frequently ornamented by having what is called a pearl edge given to them. Ribands are woven in pieces, each 36 yards in length. The finest are made entirely of Italian silk; the next in quality of a mixture of Italian and Bengal silk; and the commoner sorts altogether of Bengal silk. The great seat of the manufacture of ribands is Coventry, where they are now made of quality equal to the finest of the productions of the Lyonese weavers: they are also made at Congleton, Derby, Macclesfield, Leek, and other places. S[SILK MANUFACTURE.]

^{*} In the early part of the funding system a separate account was kept of each loan, and of the tax imposed for payment of the interest. The inconvenience and confusion of this method led to the appropriation of the various branches of revenue into three funds;—the *Spergate Rund*, 1715; and the *South Sea and General Funds*, 1716,—each chargeable with the payment of certain annuities then due by the public. And in 1786 these were formed into one fund, thence termed the *Consolidated Fund*.

RICE (Du. Ryst. Fr. Ris. Ger. Reiss. It. Miso. Por. & Sp. Arros), an esculent grain, the produce of a panicled grass (Orysa sativa), which resembles common barley. Although less nutritious than any of the cerealia, it forms the chief object of culture in China and the East Indies. And it has been introduced into Carolina, Georgia, the West Indies, and several parts of Central and South America. In Europe its cultivation is confined chiefly to Lombardy, Valencia, and some other districts adjoining the Mediterranean.

Rice requires not only an intense heat, but also moisture so abundant, that the field on which it grows must be repeatedly laid under water. Indeed, without its due degree of moisture, rice proves almost wholly unproductive; and hence the dreadful famines which sometimes occur in different parts of India, where it forms the sole dependence of the population. Rice is of course an article of extensive

dreadful famines which sometimes occur in different parts of India, where it forms the sole dependence of the population. Rice is of course an article of extensive commerce in India and China; and since the reduction of duty in 1828, a considerable increase has taken place in its consumption in this country, more particularly at times when corn is dear. It is imported in two states,—cleaned of the husk, and in the rough state called paddee; the former is brought from India and Java, the latter from the United States. Of late years an increased quantity of paddee has been imported in comparison with cleaned rice; there being less waste in the transport of the former, and its cost less; while, by the superior machinery employed in Britain, the husk is removed with less injury to the grain than in the country of production. The import of paddee from America has been further encouraged by the discriminating duty charged on foreign cleaned rice. S

The following extract from the London Price Current of October 1842, affords a comparative view

couraged by the discriminating duty charged on foreign cleaned rice. So
The following extract from the London Price Current of October 1842, affords a comparative view
of the estimation in which the different kinds introduced into the British market are held:
Rice in bond,—Carolina, per cwt., 21s. to 25s.: Rast India, fine Patna, is. to 0s: Bengal white,
11s. to 12s. 6d.: Cargo, 2s. 6d. to 10s.: Java, 7s. 6d. to 11s. 9d.: Madras, 2s. to 10s.
The bag of East India rice contains about 11 cwt.; the American cask, 6 cwts.
On the exportation of foreign rice that has been cleaned in this country, a drawback per cwt. is
allowed, equivalent to the duty paid on 4 bushels of paddea.

RICE PAPER in said 4th a manhanne of the American cask.

RICE PAPER is said to be a membrane of the Artocarpus incisa, or breadfruit tree. It is brought from China in small dyed pieces, and is used in the manufacture of several fancy and ornamental articles. 8

RIXDOLLAR. [Germany.]
ROAD, an artificial line of communication between two places, made by levelling ROAD, an artificial line of communication between two places, made by levelling and hardening the surface of the ground, to facilitate transit thereon. The extent and quality of the roads in a country may be safely held to mark the degree of its wealth and civilisation, and generally are to be regarded as a prominent feature of national economy. Such were the Roman roads which connected the most distant parts of the empire with the capital, and of which many traces still remain in this country as well as on the Continent. The modern roads, previous to the beginning of last century, were little adapted for ordinary use by wheel-carriages. Throughout the United Kingdom, generally, commodities were transported upon pack-horses, which, like the mules in Spain, were trained to follow each other in long succession on the rough, narrow, and often scarcely passable canseways or tracks; and the common mode of travelling for passengers was in like manner on horseback. In the beginning of the 18th century, road-making became a subject of greater attention. And, after 1760, the general spirit of improvement which characterized that period led to the formation of carriage-roads in all the great thoroughfares; no fewer than 452 turnpike acts having been passed in the course thoroughfares; no fewer than 452 turnpike acts having been passed in the course of fourteen years. Since then the same system has been progressively extended; and carriage-roads are now established through every parish of the kingdom. Many of these must be pronounced highly defective in construction when compared with the modern formations of Macadam and Telford; but, taken as a whole, they are unequalled in any other country; and, in connexion with our canals and railways, constitute that wonderful system of internal communication,—that viabilité immense, as designated by the French,—for which Great Britain is the admiration of the world.

admiration of the world.

In the laying down of roads no acclivity should, according to Mr Telford, if practicable, exceed I foot in 35, so that no difficulty may be presented to fast driving either in ascending or descending; and modern engineers consider it unadvisable in any case to exceed I in 24; though there are acclivities twice as steep in some turnpike roads. A road should also be of a regular uniform width, and be properly fenced. When likely to be much used by heavy carriages, it should have a regular foundation of large stones; over which a coating, about 6 inches deep, of small broken stones, should be laid, so as to present a surface, uniform, smooth, and convex. It is also of importance that a road should be raised above

the level of the surrounding ground, have proper draius, and an exposure to sun and wind, so as to produce rapid evaporation of moisture.

and wind, so as to produce rapid evaporation of moisture.

In England, according to Blackstone, every parish is bound at common law to keep the roads that intersect it in good condition; and by the 2 & 3 Philip and Mary, c. 8, the parishioners were obliged, according to their ability, to provide labour and implements for four days' work upon the roads annually. This rude plan of forced or statust labour of them on in Europe was improved by other acts; but in course of time it was gradually superseded on all the great thoroughfares by the turnpike system; and it was also abandoned for other highways in 1835, when the laws relating to cross or parish roads were consolidated by the act 5 & 6 Wm. IV. c. 50. This act authorizes a surveyor, elected annually by the vestry, to key a rate on the parish, on the basis of the poor assessment; the rate-payers, however, being empowered, if a majority see fit, to divide among themselves the carriage of the materials required for the roads. A number of parishes may unite and appoint a surveyor; and in parishes having more than 5000 inhabitants, a highway board may be established.

The English turnpike system, or plan of raising a revenue for the construction and appoint a surveyor and to plan of raising a revenue for the construction and appoint a surveyor and any be established.

be established.

The English turnpike system, or plan of raising a revenue for the construction and repair of roads by imposing tolks at gates or turnpikes, though introduced by the 26 Ch. II. c. 1, was not established to any extent until after 1763. Under this system, the road is placed, coording to its length, under the management of one or more sets of trustees, who are appointed by statute, and generally consist of the landed proprietors and principal farmers and tradesment in the vicinity. All details are committed to surveyors appointed by them; and the trustees, being empowered to contract loans on the security of their revenues, are enabled very speedily to complete any undertaking. In 1839, the number of turnpike trusts in England and Wales (including consolidations) was 1116; their revenue, £1,532,936; and the amount of loans for which the tolks were mortgaged, £7,239,835, which was exclusive of £1,194,699 of arrears of interest, and the amount of the floating debts.

g debts.

27,323,635, which was exclusive of £1,194,699 of arrears of interest, and the amount of the floating debts.

From a summary in 1841 by Mr Tidd Pratt, of 16,965 returns, made pursuant to the act 2 & 3 Vict. c. 40, by surveyors of parishes, townships, or piaces which repair their own highways (168 seturns, however, being deficient for Engiand and 125 for Walsel), it appears that in 1839 the length of turnpikes was 19,666 miles; of streets or roads repaired under local acts, 2666 miles; making of highways for wheeled carriages in England and Walse, 119,527 miles. The amount of rates levied in 1839 (exclusive of turnpike dues), was £1,319,818; and the average expenditure in the repair of the highways (exclusive of turnpikes and roads and streets under local acts), was £12, 18a,5d. per mile, and in law and other expenses 3a, per mile. According to other returns, the average annual expenditure in the 5 years ended 1839, on 22,000 miles of turnpikes and roads under local acts, was nearly £51 per mile; whereof—£36 on mere repairs; £9 on improvements; and £6 on management.

In Scortarap, the ancient system was that of the statute or compulsory labour of the inhabitants for 3 days before and 3 days after harvest; and the act 5 Geo. I. c. 30, provided that, in the event of this proving insufficient, an assessment, not exceeding a per cent. on the soluted rent, might be imposed on landed property. After 1750, this plan was superseded as to the great thoroughfares by the turnpike system, as in England. It has also been greatly modified in other respects; most of the counties having obtained local acts commuting the statute isbour for a fixed money payment, and substitute, the provost and two eldest ballies of each royal burgh in the county, all justices of peace, owners of estates worth £100 Scots a-year and upwards of valued rent, and their eldest sons, and one guardian or trustee of all minors possessing such amount of property. The county is divided into district, each placed under the resident trustees and surveyors app

and the district meeting prepares annually a state and estimate for the general meeting, which has power to order an assessment on the occupiers of land, and which in other respects directs and controls the district meetings. Sufficient powers are given to the trustees for obtaining land and materials for the roads and bridges.

But in the northern counties a different system of supervision prevails under the "Commissioners of Highland Roads and Bridges," appointed by government in 1803 with the view of stimulating improvement in these districts. They are authorized to decide upon the roads proper to be constructed, and to superintend their execution; the expense being defrayed by government and the proprietors jointly, each one-half. This measure has been highly successful; and about 300 miles of excellent roads, and upwards of 1100 bridges, have been constructed in this way. The old military roads formed by General Wade (1720-1730) were placed under the management of the commissioners in 1814; and about 300 miles of them are still kept up.

We possess no statistics of the ordinary county roads of Scotland; nor of the turnpikes later than 1829, when their length was 3666 miles; the number of trusts, 190; the amount of their debts, £1,486,082; and income, £187,584.

IN LEBLAND, the statute labour system was abolished in 1763, when the road administration was vested in the grand juries. Mail-coach roads are determined upon by the postmaster-general, and their expense defrayed by a tax on the county. The supplies for other roads are raised by a tax on each barony for the portion within its boundaries. Since 1831, also, a considerable extent of road has been constructed at the public expense, under the board of public works, constituted by the act 1 & 2 Wm. I.V. c. 33.

Of the roads in the United Kingdom, the best is usually stated to be that between

Of the roads in the United Kingdom, the best is usually stated to be that between Cortae roads in the United Kingdom, the cest is usually stated to be that between London and Holyhead, constructed, under the superintendence of parliamentary commissioners, by Mr Telford; but, in general, the English roads are greatly inferior to those of Sootland, more especially the turnpikes and those formed by the Highland Commissioners, which, notwithstanding the rugged nature of the country, have mostly moderate acclivities, and are indeed in every respect models of the manner in which the difficulties presented by a mountainous country may be successfully overcome. This superiority in the northern roads is stated by Sir Henry Parnell to arise "in consequence of the excellent materials which abound in all parts of Scotland, and of the greater skill and science of Scotch trustees and surveyors" (Treatise on Roads, p. 313). Much is also due to the superiority of the Soutish county management over the English parish system. The Irish roads are likewise, generally speaking, well laid out and in good repair. Indeed, both Ireland and Scotland possess natural advantages as to material for road-making to which

county management over the English parish system. The Irish roads are likewise, generally speaking, well laid out and in good repair. Indeed, both Ireland and Scotland possess natural advantages as to material for road-making to which England cannot lay claim, more especially the district between the Tees and the Trent, where the formation is chiefly coal, sandstone, and soft limestone. ROMAN or PAPAL STATES, stretch across the central part of the Italian peninsula in an oblique direction, from the Adriatic to the Meditarrancan, and between Tuscany, Modena, and Lombardy, on the N. W., and Naples on the S. E. Area, 17,822 sq. miles. Population in 1833, 2,742,000. Capital, Rome; pop. 183,000. Government, an elective monarchy, the pope for the time being the absolute sovereign, with a consulting assembly of cardinals. S

The papal territory is divided into two unequal portions, mostly level, by the Apennines, which traverse the country from N. W. to S. E. The most extensive is the western portion, which contains the city of Rome and the Tiber; but a great part of it is waste and pestilential, particularly the Campagna di Roma and the Pontine Marshes. The eastern portion, especially Bologna and the March of Ancona, is more ferritie and better cultivated; producing wheat, make, rice, hemp, and tobacco. The elevated districts supply timber, fruits, and even silk, wine, and oil, but of a quality inferior to those of the Tuscan and Neapolitan territories. The manufacturing industry is mostly confined to coarse woollen cloths, for the internal consumption. There are, however, soap, hats, liquorice, war-candles, and catgut in several towns. But all the productive industry of the country, and especially agriculture, is in a state of backwardness, from the powerty and ignorance of the people, the perpetual intervention of the ecclesiastical authority, as well as heavy taxes and ill-directed legislation.

The provinces on esch side of the Apennines having little communication with each other, some are exporting while others

yards of stone, brick, or slate work.

ports, corn, silk, wool, wax, hemp, rags, &c. In 1835, 1293 vessels, burden 68,828 tons, cleared with cargoes valued at 1,100,300 scudi.

Civita Veckia, the only good port on the W. coast, lies in lat. 42° 5' N., long. 11° 44' E., 35 miles N. W. of Rome. Pop. 3000. The harbour is from 14 to 18 feet deep; and there are docks and a lazaretto: 1520 vessels, burden 133,402 tons, cleared in 1837.

Measures and Weights.—The foot = 11-27 or dollars), divided into 10 paoli, or 100 bajocchi. The paint = 87.96 imp. inches; the mercantile canna of 8 palmi = 78-35 imp. inches; the builders' canna of 10 palm = 87.96 imp. inches; the mile = 1628 imp. yards, or 7½ furlongs.

The twola censuals = 1000 sq. metres = 1196 sq. yards: the rubbio = 18-484 tavole.

The wine barile of 38 boccali or 128 foglicite = 12-24 imp. gallons; and 16 barili = 1 botts: the soma of oil of 80 boccali = 36'-14 imp. gallons of oil of 80 boccali = 36'-14 imp. gallons of 10 id 60 boccali = 36'-14 imp. gallons or 128 foglicite = 12-24 imp. gallons; and 16 barili = 1 botts: the soma of oil of 80 boccali = 36'-14 imp. gallons or 10 ibs., 74 imp. gallons or 10 ibs., 74 imp. gallons or 10 ibs., 74 imp. gallons or 100 ibs., 74 imp. gallons or 100 ibs., 74 imp. gallons or 100 ibs., 74 imp. gallons or 100 ibs., 74 imp. gallons or 100 ibs., 74 imp. gallons or 100 ibs., 74 imp. gallons or 100 ibs., 74 imp. gallons or 100 ibs., 74 imp. gallons or 100 ibs., 74 imp. gallons or 100 ibs., 74 imp. gallons or 100 ibs., 74 imp. gallons or 100 ibs., 74 imp. gallons or 100 ibs., 74 imp. gallons or 100 ibs., 74 imp. gallons or 100 ibs., 74 imp. gallons or 100 ibs., 74 imp. gallons or 100 ibs., 74 imp. gallons or 100 ibs., 74 imp. gallons or 100 ibs., 84 imp. gallons or 100 imp. gallons or 100 ibs., 84 imp. gallons or 100 imp. gallons or 100 ibs., 84 imp. gallons or 100 imp. gallons or 100 ibs., 84 imp. gallons or 100 imp. gallons or 100 imp. gallons or 100 imp. gallons or 100 imp. gallons or 100 imp. gallons or 100 imp. gallons or 100 imp. gallons or 100 imp. gallons or 1

mercial pound.

In Ancona the bracelo = 25.33 Imp. inches; the wine soma of 2 barili or 34 boccali = 18.90

Imp. gallons; the rubble of corn of 8 coppe = 187 Imp. bushels; and 100 Ancona ibs. = 73.75

De. avoirdupois.

Monty.—Accounts are stated in scudi (crowns)

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ROOD, the one-fourth of an acre; also a term applied by artificers to 36 square

ROPE, a larger kind of cordage, generally formed by a combination of vegetable fibres. Except for ship-cables, for which iron-chain is now much used, hemp is the substance principally employed in this country in the manufacture of rope, though it is occasionally made of Indian jute and coir. Of late years, hemp mixed with caoutchouc has attracted some attention; likewise cordage made of wire.

A hempen cable of 12 inches girth, and length 130 fathoms, weighs 3075 lbs. And as the weights of two cables of equal lengths will be as their sections, or squares of the girths, we have the following rule for the weight :—Multiply the square of the girth in inches by 21 (more accurately 21-3), the product is the weight in lbs. Also, as the breaking strain will be as the section, it will be as the weight, and will be found nearly by dividing the weight in lbs. by 100; the quotient is the breaking strain in tons. This rule is of course liable to uncertainty from the quality of the

ROSE, a well-known flower (Rosa), from the petals of which rose-water is distilled, and a butyraceous oil or perfume called Attar or Otto of Roses, largely manufactured in India, Persia, and Turkey. The latter is a very costly article; manufactured in India, Fersia, and Turkey. The latter is a very costly article; 20,000 lbs. of rose leaves being required, according to Bishop Heber, to yield attar equal in weight to a rupee; and it is often adulterated with oil of sandal-wood, and the crystalline appearance of the genuine article imitated by the addition of spermaceti. The real attar congeals with a slight cold, floats in water, and dissolves in highly rectified spirits of wine. It is seldom imported from India for sale; but considerable quantities are brought from Turkey. The English oil is of water inferior educy and and to become reneid

a very inferior odour, and apt to become rancid.

ROSEWOOD (Por. Pao de rosado. Sp. Leno de rosa), a beautiful fancy-wood produced by a large tree found in Brazil, India, and the Canaries. It should be chosen in large pieces, of irregular knotty grain, well filled with resinous fibres, sound, and heavy. It is of a reddish colour; has an agreeable odour; and is esteemed according to the degree in which the darker parts are distinct from the purple red, which forms the ground. Rosewood is used for cabinet-work, either solid or cut into

which forms the ground. Rosewood is used for cabinet-work, either solid or cut into veneers, nine to an inch; and, next to mahogany, is now the wood most in use for such work. About 1600 tons are annually imported, chiefly from Brazil.

ROSIN, a commercial name for the residuum of the distillation of turpentine; it is a light, hard, brittle, inflammable substance, transparent, and of a dark colour. There are several kinds,—as black or common, and amber rosin. It is made at Hull, London, and other ports communicating with the Baltic states; and is used in the manufacture of soap, varnishes, and other articles. SROTTENSTONE, a kind of clay of a dirty gray or reddish-brown colour, passing into black: it is dull, earthy, soft, meagre to the touch, and emits an unpleasant odour when rubbed. Localities,—Bakewell in Derbyshire, Wales, and Albany near New York. It is used in polishing metals.

RUBLE. [Russia.]

RUBY, a name applied by lapidaries to two kinds of precious stones essentially

RUBLE. [Russia.]

RUBY, a name applied by lapidaries to two kinds of precious stones essentially different. The Oriental ruby, next to the diamond the most valuable of gems, is properly a red sapphire. The other rubies are different varieties of spinel.

RUM is a spirit procured by distilling a fermented fluid prepared from the refuse in the operation for making sugar; the peculiar flavour being derived from an essential oil existing in the juice of the cane, which is brought off by the spirit. The product of the distillation is colourless; but is afterwards coloured by the addition of a little burned sugar. The best is made from molasses [Sugaa]; and it is preferred when well kept and of good age, considerable body, smooth oily it is preferred when well kept and of good age, considerable body, smooth oily taste, and of a brownish transparent colour. When of a fiery taste and impid colour it is either too new or adulterated, as it often is, especially by retail dealers, either with corn spirit or home-made molasses spirit; which last, from similarity of taste, is not readily known from the genuine liquor.

The West India Islands and Guine are the countries chiefly distinguished for the

taste, is not readily known from the genuine liquor.

The West India Islands and Guiana are the countries chiefly distinguished for the produce of rum, more especially the British possessions. The best is that of Jamaica, the produce of which is likewise highest in quality; what in trade is called "Leeward Island rum" is inferior to it, though still good. The quantity annually produced depends generally upon the nature of the season; but the change occasioned by the abolition of negro slavery has of late years led to a gradual decline in the shipment of rum, as well as of the other West India staples. In the three years ending 1831, the average importation into the United Kingdom from the West Indias (including Guiana) was 7.180.000 gallons; but in the three years ending 1841, the cluding Guiana) was 7,180,000 gallons; but in the three years ending 1841, the average was reduced to 3,524,320 gallons,—the importation in 1841 being indeed only 2,770,161 gallons. [West Indies, after supplying the United Kingdom, have

generally left a considerable surplus, especially of the inferior kinds, usually sent to the other colonies, Germany, and elsewhere; and there is still a re-exportation, notwithstanding the diminished production of the West Indies: the consumption of this country having also declined, until in 1841 the quantity (exclusive of that used for marine stores) was only 2,300,000 gallons; being below the amount at the beginning of the century, which was upwards of 3,000,000 gallons. This decline has been comparatively greatest in Ireland and Scotland, especially the former, where the cousumption, though 860,000 gallons in 1800, has fallen to about 20,000, owing to the great rise of duty during the war, and the substitution of home-made spirits. home-made spirits.

The importations of rum from other countries have until lately been nearly confined to small occasional parcels from the foreign West Indies and Brazil, none fined to small occasional parcels from the foreign West Indies and Braxil, none of which, owing to the discriminating duty in favour of our colonial produce, was entered for home consumption. In 1836, however, the duties on East and West India sugar were equalized, and the rule which confined the navy contracts to West India rum sholished. These measures were followed by importations of East India rum—in 1840 to the extent of 312,000 gallons. And this trade has been further stimulated by the equalization, in 1842, of the duties on East India and West India rum, by the reduction of the former to the colonial rate of 9s. 4d. per gallon. The admission of East India rum to the British market will probably lead to improvements in its quality, which at present is very low.

The rum supplied to the navy is furnished duty free, as also that required for stores by merchant ships. The annual amount thus delivered in the United Kingdom, on an average of the 14 years ending 1839, was—for the navy, 372,000 gallons; for ship stores, 315,000 gallons. 8

RUPEE. [India.]

RUSSIA, an empire comprising the whole northern portion of the eastern hemirousila, an empire comprising the whole normer portion of the eastern hemisphere, from the frontiers of Prussis and the Gulf of Bothnis on the W. to the Pacific on the E.; also a large tract on the N. W. part of America; with numerous islands contiguous to these countries. The whole, exclusive of certain territories called oblasts, is divided into about 75 governments or viceropalities. Area estimated at 7,700,000 sq. miles; and population at 66,000,000, of whom about 47,000,000 are contained in European Russia. Capital, St Petersburg. Government an absolute monarchy. ment, an absolute monarchy. S

ment, an absolute monarchy. \$\frac{8}{2}\$

This empire is divided into two great parts by the Ural Mountains, which on the N. separate Asiatic from European Russia. The former is generally a vast level region, declining imperceptibly towards the Arctic Ocean, and rising gently towards its southern border, where it is lost in the immense mountain-ranges which separate it from the Chinese empire and Tartary. The northern portion of this tract is mostly a frozen desert, but the southern is generally fertil. The whole of this region, however, as well as the American territory, being but thinly inhabited by barbarous stribes, possesses as yet little or no commercial interest; and we shall therefore principally confine our attention in the present article to the tract which lies to the W. of the Urals, embracing European Russia and the country between the Black Sea and the Caspian—the main body and seat of the wealth and power of the empire.

European Russia may also be considered as one vast plain. If the Ural Mountains on its eastern border, and a mountain-tract in the Crimea be excepted, there is in this immense region no part elevated more than 5:00 feet above its base, or 1:00 feet above the sea-level. That great tract of low land which begins in Northern Germany, expands in Russia to its greatest breadth, exceeding 1900 miles; and the water-shed which divides the rivers that flow to the Baltic, Arctic Ocean, Black Sea, and Caspian, consists merely of a table-land, in the N. E. parts called the Uwalli and Valdai Hills, whose declivities form long and generally imperceptible slopes. The most fertile region traverses the central part north-castward, from between 48° and 55° on the W. to between 85° and 56° N. Iat. on the E.; and these owners are some of the Empire of Southern Russia and of the greater part covered with forests or bogs, until we arrive at the shores of the White Soa or Arctic Ocean, where it is mostly a swampy desert, particularly towards the N. E., between the Urals and the river Mesen, the region

The Climate of Russia is much colder than that of other European countries in the same latitude; and the farther we proceed eastward the temperature becomes still lower, arising from the dreary uncultivated surface of the land, its distance from the ocean, and the vast regions traversed by the north and east winds. The summer heat of Russia, however, is in general greater than in other countries under the same parallels. The provinces which border on the Baltic and on the White Sea have a wet climate; and this feature extends to the elevated tract which borders the basin of the Volga, on the N. and W. Farther east the rain decreases in quantity; and the southern districts have a dry climate.

tricts have a dry climate.

The vast Forests of Russia constitute one of its most remarkable features, and a principal source of wealth; the timber, tar, pitch, and ashes derived from them forming staple exports. They abound chiefly in the north, covering about three-fourths of its extent between 65° N. lat. and the Volga; the trees being pine, fir, larch, alder, and birch, with a few limes. The central provinces, between the middle course of the Volga and the Dnieper, have scarcely sufficient wood for

their own consumption; but extensive forests, chiefly pine and fir, occur on the W. of this tract, especially on the swamps of Pinsk and Ratnor, and on the banks of the Niemen, whence, and by the Vistula, much of the produce of the district is conveyed to the Prussian ports of Memel and Dantsle, and in part by the Duna to Riga. To the east, also, of the central district there are extensive pine and fir forests in the governments of Perm and Viatka; and of oaks, limes, elms, and ash, in those of Kasan, Nisnel-Novgorod, Pensa, and Saratov. The oak forests are chiefly on the Voiga near Tcheborsar. The southern provinces are almost entirely without trees.

In Mineral Russia is rich. The chief mines are situated in the Ural and Aliad Mountains, and those which occupy the vicinity of Nortachinak in Siberia. In 1837, the produce of gold from the Ural and Siberian mines was about 470 poods, equal in value to nearly £1,000,001; that of silver, from the Alial and Siberian mountains, 300 poods, £330,000; and the annual produce of platina, chiefly in the Urals, is about 140 poods. Copper is produced to the extent of 210,000 poods a-year, chiefly in the Urals; also in the Alial, Caucasus, Valdai Hills, &c. Other metals and coal exist, but they are not worked. Sait is procured in the Urals, the Crimea, and other places, chiefly in the E. and S. provinces; but it is deficient in the Baltic provinces, where it is imported from England and Austria.

Agriculture is but in its first stage; yet the grain produced is much more than is required for the consumption. The S. Baltic countries, Poland, and the governments nearest to Moscow, have the greatest proportion of cultivated land. Rye, the most common grain, may be grown in all parts except the Arctic region and the steppes; it is produced in greatest quantity in the district through which the great roads and water-courses run; but they do not succeed up and the Volga on the N. The cultivation of barley extends to 67° N. lat. Oats are extensively cultivated in the districts throu

The Fisheries of most value are those of the rivers Volga and Ural, and of the Sea of Azof; it except some caviar and isingless from the S. ports, scarcely any of their produce is sent to

The Fisheries of most value are those of the rivers Volga and Ural, and of the Sea of Azof; but except some caviar and isinglass from the S. ports, scarcely any of their produce is sent to other countries.

Manyactures were called into premature existence by Peter the Great, and, under the influence of the protective system, they have risen to some consideration, especially of late years. The establishments in 1839, exclusive of mines, furnaces, and amelting-houses, were 6855 in number, employing 412,931 work-people; which, according to the official report, was an increase in three years of 840 manufactories, and of 50 per cent. on the workmen. Of these manufactories, 616 were for wooling goods; 227 alik; 467 cotton; 287 lines; and 485 metal wares; the rest consisted chiefly of tanneries, tallow melting-houses, candle and soap works. The chief seat of manufactures is Moscow and its government; and next, the governments of Viadimir, Nisnei-Novgorod, Saratov, Peter-burg, and Tula. The Russians excel in the manufacture of leather; and from their advantages in respect to raw material, their canvass, strong liness, cordage, felt, mats, potaslies, soap, candles, caviar, and isinglass, are quite as good as those made elsewhere; but in almost all other branches their products cannot compete with those of Western Europe, more especially Britain, as to finish, durability, and cheapness; and their existence is therefore dependent upon the continuance of a restrictive or rather prohibitory system of import duties. The annual value of the Russian manufactures was estimated in 1837 at £23,000,000; and in 1841, at £30,000,000. The Inland Trade is very extensive; and it is facilitated by the vast means of internal communication afforded by the Volga, Dwins, Niemen, Duna, Dun, Neva, and their tributaries, which, from the level nature of the country, are nearly all mavigable, especially those which rise northward of 53° N. lat. And this navigation has been improved by canals, by means of which the Volga is connected with the Nev

eonsiderable. The principal branch of trade is that with Great Britain, chiefly through the northern ports; that with Italy and Turkey, through the southern ports, ranks next in importance; and there is also an active intercourse with the neighbouring Baltic states, the Notherlands, France, and the Hanse Towns; but (except with the United States and Cuba) there is little intercourse with more remote places. Besides her maritime commerce, however, Russia carries on a considerable trade by land across her European and Asiatic frontiers. In this way te and other articles are procured from the Chinese, with whom an exchange of commodities takes place at Kiachta. In 1839, the total value of the exports from Russia was 339,000,000 robles, or £14,780,000; and the shipping despatched (exclusive of coasters) amounted to 5582 vessels, 1,184,633 tons; of which only 1051 vessels, 165,920 tons, were Russian. Of the shipping entered, nearly two-thirds were in ballast, arising from the coarse and bulky nature of the exports compared with the imports.

The British trade took its rise in the reign of Elizabeth, shortly after the discovery (1584), by Richard Chancellor, of Archangel, the port to which it was long confined. Notwithstanding the existing restrictions, it is very extensive, though inconsiderable to what it might become under a system of free trade; no other countries in the globe being, naturally, better fitted to supply each other's wants. The annual amount of British produce and manufactures (according to the declared value in England) imported into Russia, on an average of the five years ending 1838, was £1,488,980; and on an average of the five years ending 1836, and the whole consist of cotton-twist and yarn: the only other article of any consequence is woollen cloth (nearly £190,000); the remainder is chiefly made up of cottons, machinery, coals, hardware, from and steel, salt, refined sugar, tin, woollen yarn, ale, and beer. Considerable quantities of indige (about 1,000,000 lbs.), coffee, occhinesly, shellac

of the latter, many are extensively engaged in manufactures, in which may employ as workmen.

The produce in different parts of the country is bought up by travelling dealers, who prepare and transport it for sale to the seaports, frontier towns, and fairs; where in return they purchase supplies of foreign goods. In the trade with the Baltio ports these dealers lay in their stocks in the interior between October and March, and transport them to the ports during the spring and summer months for delivery, if previously contracted for, to the purchasers, or for chance sale for exportation. The foreign trade is chiefly carried on by wealthy merchants of foreign extraction, partly foreign subjects, including many Germans and British, settled at the seaport and frontier towns, and also at Moscow, whose connexions abroad enable them not only to pay ready money to the inland dealer for the produce they buy of him, but also to make advance thereon who the trade outract prices, 6 or 8 months before delivery, besides granting long credits to the same parties, and other inland buyers in selling to them goods imported or received on consignment. (Cark's Russia Trader's Assistant.)

BALTIC PORTS.

BALTIC PORTS.

Baltic Ports.

Bi Petersbury, the magnificent capital of the empire, founded by Peter the Great in 1703, is situated in lat. 39° 56° N., long. 30° 19° E., on the banks and islands of the Neva, near its mouth, at the E. extremity of the Gulf of Finland. Pop. in 1893, 476,000. It excels all the other cities in manufactures and commerce, though its navigation is closed by frost generally from November until May. Above 18,000 barks annually arrive from the interior with articles for consumption and shipment. In 1839, the principal exports were—239,000 poods flax (not half the usual quantity, it may be remarked): 2,255,000 poods hemp: 3,700,000 poods flax (not half the usual quantity, it may be remarked): 2,255,000 poods hemp: 3,700,000 poods inon, mostly in bars; 184,000 pieces sallcioth, ravenducks, and flem; 5,000,000 archines diaper, drillings, and crash; 177,000 poods sheeps' wool; 318,000 poods bristles; 393,000 pieces isth-wood and battens; 39,000 poods sheeps' wool; 318,000 poods bristles; 393,000 pieces isth-wood and battens; 39,000 poods sheeps' wool; 318,000 poods bristles; 393,000 pieces isth-wood and battens; 39,000 poods sheeps' wool; 318,000 poods bristles; 393,000 pieces isth-wood and battens; 39,000 poods potash: the chief other articles sugar, almost all Havannah; 700,000 poods ealt may far an an annual a

tons, £354,000; linseed, 202,650 quarters, £342,000; grain, chieflyrye, 245,000 quarters, £235,000 timber and deals, £153,500. The imports, consisting principally of tropical produce, manufactures, and wine, are in value only about one-third that of the exports. In 1838, the amount of shipping despatched was 1346 vessels, 180,968 tons; of which 468 vessels, 77,220 tons, went to Britain; the rest principally to Denmark, Netherlands, and Sweden.

The chief other Battic ports are Narva, Revel, Fernau, Libau, and Windau.

PORTS OF THE WHITE SEA.

PORTS OF THE WHITE SEA.

Archangel lies on the Dwina, 30 miles from its mouth, in lat. 64° 39′ N., long. 40° 44′ E. Pop. 25,000. It was the only Russian port accessible to foreigners down to the foundation of Petersburg; after which it lest much of its importance, though it is still a place of considerable trade, from its position on the Dwina, a river which, besides its own lengthened course; is connected by canals both with the Volga and the Neva. Its navigation is generally open from the latter part of May to the middle of October. Exports, chiefly rye, cats, timber, flax, hemp, iron, mats, linseed, potash, tallow, tar, pitch, train-oil, furs, canvase, coarse linen, cordage, and hair. Imports, tropical produce, salt, woollens, cottons, hardware, and herrings. The exports vary considerably in amount according to the demand for corn. In 1838, the shipping despatched amounted to 73,700 tons, including 55,260 tons to Britain; the rest chiefly to the Netherlands and Sweden.

Onega, at the mouth of the river of that name, carries on a similar trade.

PORTS ON THE CASPIAN.

PORTS ON THE CASPLE.

Astracas lies on a small island in the Volga, 30 miles from its embouchure, in lat. 46° 21′ N., long, 48° b′ E. Pop. 30,000. It is the centre of the extensive fisheries carried on in the Volga and Casplan. The fish taken are chiefly sturgeon, carp, and seal, particularly the first; and above 30,000 barrels of caviar, prepared from sturgeon rose, have been exported in a single year. Astracan is also the great entrepôt of the trade with Persia and the countries east of the Casplan,—transmitting (chiefly through Armenian merchants) leather, furs, iron, copper, and tallow, in archange for silks, cottons, raw silk, drugs, and carpets.

Baku, farther S., is the only other Casplan port deserving of notice.

PORTS OF THE BLACK SEA AND SEA OF ACOF.

Baks, farther S., is the only other Caspian port deserving of notice.

PORTS OF THE BLACK BEA AND SEA OF AND.

**Odiessa lies in Cherson, on the N. coast of the Black Sea, lat. 46° 28° N., long. 30° 43° E., in a fine bay, with sufficient depth almost to the abore for the largest vessels; it besides possesses a harbour, with accommodation for 200 shipa. Pop. 63,000. Although now ranking next to Petersburg in importance, it has grown up almost wholly since 1794. From the year 1817 it has been a free port, receiving its importa, which consist chiefly of tropical produce, oll, wine, spirits, timber, cotton-twist and raw cotton, silks, woollens, and other manufactured goods, within a certain enclosed space, exempt from duty. Odessa, from its advantageous situation and privileges, is the great emportum of the produce of S. Russia destined for exportation. Its principal staple is wheat, of which about 1,000,000 chetwerts arrived on an average of the three years ending 1840; and the average prices of the best, free on board, in the same period, was 34s. 6d. per quarter; and it is rarely under 28s. or 28s. It is mostly brought from the Ukraine in carts, owing to the difficult inavigation of the Dnieper and Dniester. In 1839, the exports consisted of—1,210,232 chetwerts of wheat; about 200,000 chetwerts rye, cata. &c.; 155,000 chetwerts linseed; 118,000 poods wool; and 223,192 poods tailow; the whole, with hides, fron, copper, wax, caviar, potash, beef, furs, cordage, salicioth, butter, singlass, and other articles, amounting in value to 48,636,330 paper rubles, or £2,180,000. The chief intercourse is with Leghorn, Genoa. Malta, Constantinople, Marsellies, and Britain. Its navigation is much less interrupted by ice than Taganrog. In 1838, the amount of shipping despatched (exclusive of about 660 coasters) was 781 vessels, 206,588 tons; and the amounts since have been still more considerable.

**Taganrog lies in the N. E. part of the Sea of Asof, in lat. 47° 18' N., long. 38° 58' E. Pop. 17,000. Its roadstead is so sh

MEASURES, MONEY, BANKS, FINANCES, &c.

MEASURES AND WEGGITS.

The British or Imperial foot and inch are in use: also the Dutch or Rhineland foot, inch, and palm; the Russian foot = 13.75 Imp. inches; the archine, cloth measure, of 16 verchoks, = 28 Imp. inches, and 100 archines = 77.77 Imp. yards; the sagene or fathom is 3 archines, or 7 Imp. feet. The verste or mile of 500 segenes, or 100 verchines, = 3500 Imp. feet, = 5 Imp. furlongs, 12 poles, and 5 feet; and 104 verstees = 1 degree of the meridian nearly.

The decistine, land measure, of 2400 square agences = 2 Imp. acres, 2 roods, 32 perches.

The vedro, liquid measure, of 100 tcharkeys, 2.77 Imp. gallons; the anker contains 2 stelkars or 3 vedros, and the oxhoft contains 6 ankers.

being divided into \$8 solotnist, and the solotnist into \$6 dolis.

The preceding are the official measures and weights of Russia, and they are in general use throughout the empire, except in the recently acquired possessions, and in a few places where old systems continue to be partially employed: Of the latter the chief are the following:—

Rigos.—100 ells, each of 2 feet, = 85°95 Imp. yards; and 13e lie = 10 Russian archines nearly. The bogshead is 6 ankers, 30 viertels, or 180 stoofs; and 100 stoofs = 28°86 Imp. gallons. The last of cats is 60 loofs; the last of wheat, briefy, and lineed is 48 loofs; the last of wheat, briefy, and lineed is 48 loofs; the last of rye is 11 liponds, or 460 lbs.; and 100 loof Riga = 29°16 lbs. avoirdupois; or 59 Riga lbs. = 1 Russian prod nearly. The mark = 32°86 troy grains.

Poland.—The ell or loked of 2 feet or 24 inches = 22°88 Imp. inches; and 100 lis = 63 Imp. yards. The mile, 20 to the degree, = 60°6 Imp. yards. The morgen, or acre of 300 perches, = 1.384 Imp. acre; and 30 morgens = 1 whoka. The garnlec, liquid measure, of 4 kwatraka, or 16 kwatrakas, e 4 French litres, or 3½ imp. quarte nearly; and 100 garniecs = 88 Imp. gallons: the beckes in 52 garnlecs. The Warsaw korsec, corn measure, of 4 cwierce, 32 garnlecs, or 128 kwatras, = 3°52 Imp. bushels; and 100 korsecs = 44°02 Imp. quarters. The pound of 16 ounces, 32 loths, or 128 drachms, = 6230 troy grains; and 100 polish lbs. Bullon is weighed by the Warsaw mark, = 3113 troy grains; but coins by the Cologne mark.

Monwy.

The integer of account is the silver ruble,

Money.

The integer of account is the silver ruble, which is divided into 100 copecs, and equal in value to 3a. 14d. sterilng; or Ru. 6, cop. 40, = £1. Formerly accounts were kept in paper or bank rubles similarly divided; but this practice was abolished by an Imperial ukase in 1839, which established the silver ruble as the only legal measure of value throughout the empire. This ukase fixed the exchange of paper into specie at the rate of 350 copecs in paper for 100 copecs in silver; making the paper ruble worth 104d. sterling nearly.

The coins are, —In gold; imperials of 10 rubles, half-imperials of 5 rubles, double ducats, and ducats; the only gold coin minted at present is the half-imperial, weight 97½ troy grains, fineness 86 zolomiks, or 1½ths, and value 16s. 12d. terling: In platina, pieces of 12, 6, and 3 rubles: In silver; rubles, politins or 3 rubles, polpotitins or 1 rubles, double grive of 30 copecs, singlegrive of 10 copecs, and pieces of 15 and 5 copecs; these are minted at the rate of 221 rubles of the fineness of 63½ zolotniks, from the Russian pound of fine silver: In conver: nieces of 2. 1, and 4

fineness of 834 zolotniks, from the Russian pound of fine silver: In copper; pieces of 2, 1, and

or opecs.

The gold coins are directed, by the ukase of 1839, to be received and paid in all government-offices, with an agio of 3 per cent. Thus, the half-imperial of 5 rubles is reckoned at 5 rubles 15 copecs in silver.

Days of grace, 10 for bills after date, and 3 for

Days of grace, 10 for bills after date, and 3 for bills after sight. The Julian Kalendar, or Old Style, is still used throughout the empire.

Poland.—Accounts are stated in florins (slots) of 30 gros, each of 10 fen. The polish florin, being valued at the rate of 84 to the Cologne

RUSSIA LEATHER (Ger. Juften. Rus. Juft, Youft), the tanned hides of oxen, manufactured in a manner peculiar to that country. It is soft, has a prominent grain, considerable lustre, and peculiar odour. In colour it is generally red or black; the former is much esteemed for binding books, and making articles where

heing divided into 96 solotniks, and the solotnik mark of fine silver, is equal 54d., but is common into 96 dolls. BANKS

The Imperial Assignation Bank, opened in St Petenburg and Moscow, 1770, and converted into a government establishment, 1786, has branches in all the principal towns, and circulates branches in all the principal towns, and circulates the national paper-money, sometimes called bank assignats, the amount of which outstanding, January 1, 1839, was 595,776,310 rubbes = £28,370,300. The notes for 100, 50, and 25 rubles are on white paper; those for 10 ruhles on pink paper; and those for 5 rubles on blue paper. The proportional value of this paper money to allver is fixed at 3½ to 1, as already potential.

money to allver is fixed at 3½ to 1, as already noticed.

According to official accounts, the capital of this bank, January 1, 1839, was £1,386,465; the amount of their deposits, belonging to private parties, £6,488,938, and to government offices, £16,777,421, including £10,330,630 to the Commercial Bank; and the amount of leans, £23,273,638, due partly to private parties, but chiefly to government offices.

The Imperial Commercial Bank; founded at 8£ Petershurg in 1818, partly under mercantile direction, has a capital of 30,000,000 paper rubbes £1,438,571. It receives deposits of coin and buillion, and has a department for transferring credits on the principle of the Bank of Hamburg. It is also a bank of discount, and makes advances upon merchandise of home production. Its property is protected against taxation, sequestration, or attachment; and subjects of countries with which Russis may be at war are entitled at all times to receive back their deposits. The bank has branches in all the principal commercial towns; and in 1838, the gross amount of its operations was £60,240,917.

There are likewise two Loan Banks;—one established for the nobility, and another, a Lombard, for advancing money on pawn and otherwise,—the profits of which belong to the Foundling Hospital of 8t Petersburg.

The Revenus accounts are not published.

FINANCES.

Foundling Hospital of St Petersburg.

Finances.

The Revenue accounts are not published, but its annual amount is estimated at about 380,000,000 paper rubles, or £17,000,000; of which 40,000,000 rubles are derived from a capitation tax of 4 rubles a-head on all male boors belonging to individuals, and on some descriptions of free-men; 89,000,000 from the obret or rent, paid by all male boors on the crown estates; 32,000,000 from customs duties; 100,000,000 from spirit duties; sait monopoly, 10,000,000; crown mines, 16,000,000; tax of 1½ per cent. on the deciared capital of merchants, 3,000,000; selgnorage on coin, 3,000,000; and miscellaneous items, 9,100,000 rubles. The taxes are partly farmed. Of the expenditure very little is known.

The National Debt amounted, January 1, 1839, exclusive of the bank assignats in circulation, to 335,146,562 rubles = £44,530,790; consisting partly of terminable, and partly of interminable debts, at 5 and 6 per cent. Of the latter, there were redeemed, up to 1839, by the Commissioners for the Discharge of Debts, £6,442,964. A considerable portion of the debt was contracted in Amsterdam and London; the agents in the former place being Hope and Company, and in the latter, Messar Rothschild and Baring Brothers. Transactions in the foreign debt are generally effected at the fixed exchange of Sa Id, per silver rubles.

a fine durable leather is required; the latter is chiefly in demand in Russia for shoe and boot making. Both kinds, when genuine, throw out a peculiar odour, occasioned it is said by their being tanned with larch bark, mixed with spirits of tar. RYE (Dan. Rug. Du. Rog. Fr. Seigle. Ger. Roggen. Rus. Rosch, Sel. Jar), a species of grain (Secale cereale) resembling wheat. It is the bread-corn of Germany and Russia; but in this country it is comparatively little cultivated, though in 1765 it is supposed to have been consumed in England by about one-seventh part of the population. It is now raised chiefly in Northumberland and Durham; though in the latter it is rarely grown alone, but mixed with wheat, in which form it is called maslin. In Scotland it is sown in various places, particularly on poor moorish soils in elevated districts, for which it is well adapted. In Orkney and Argyllshire it is used exclusively for the manufacture of straw plait.

SABLE (Fr. Zibeline. Ger. Zobel. Rus. Sobal), a species of weasel (Mustela sibellina), celebrated for the fine quality and rich colour of its fur, the hairs of which turn with equal ease in every direction. This animal is a native of Northern Europe and Siberia. In Samoieda, Yakutak, Kamtschatka, and Russian Lapland, it is found of the richest quality and darkest colour. [Furs.]

SADDLES and Harness are made in all the towns of the United Kingdom, but

the chief seat of the manufacture is London. A progressive increase has of late years taken place in the foreign demand for these articles; and the declared value of the annual exports is now nearly £100,000. They are sent chiefly to the West and East Indies, and in smaller parcels to Australia, Cape of Good Hope, Spain,

and East Indies, and in smaller parcels to Australia, Cape of Good Hope, Spain, Brazil, and other countries. S.

SAFFLOWER (Fr. Cartame. Ger. Saffor. It. Zaffrone), the flowers of an annual plant (Carthamus tinctorius) growing in Egypt and the warmer parts of Asia, Europe, and America. They are of an orange-red colour, and are brought to this country in a dried state, for the sake of a dye which is extracted from them. About 5000 cwts. are annually imported, which, with the exception of from 300 to 500 cwts. from the United States, are brought almost wholly from the East Indies. About half this quantity is entered for home consumption. Safflower is chiefly used for dyeing silk; producing different tints of red and orange according to the alteratives employed in combination. It also forms the basis of rouge. The dye is sometimes made into cakes, termed stripped safflower. S.

SAFFRON (Fr. Safran. Ger. Saffran. It. Zafferano. Sp. Axafran) consists of the summits of the pistils of the Crocus satious, a bulbous plant, found in various parts of the S. of Europe and Asia, and cultivated near Saffron Walden in Essex. The pistils are generally dried and compressed into firm cakes, but the finest, called hay saffron, consists of the pistils merely dried. Cake saffron should be chosen fresh, neither dry nor very moist, close, of a fiery orange red colour, and an acrid diffusive odour. It should be preserved in a bladder within a tin box. The English saffron is superior to any that is imported. It is used as a colouring substance, and to a small extent in medicine. Meadow saffron is a bulbous plant (Colchicum autumnale) of a different kind, the roots and seeds of which are also employed medicinally. S.
SACA-BENIUM.

extent in medicine. Meadow sairon is a bulbous plant (Coloncum autumnate) of a different kind, the roots and seeds of which are also employed medicinally. S SAGAPENUM, a gum resin, supposed to be a kind of assafettida (Perula Persica). It is sometimes agglutinated in masses of various sizes, but ought to consist chiefly of whitish shining grains, tenacious, and, when softened by heat, very viscid, having a smell resembling gum ammoniac, and a taste like assafettida. It is inflammable, but less soluble in alcohol than in water. Sagapenum is used in medicine, holding a kind of middle place between assafettida and galbanum. It is imported from Alexandria.

SAGO, a farinaceous alimentary substance, obtained from the pith of several species of palm, found in the Eastern Islands and S.E. of Asia. The quantity yielded by one tree is very considerable, sometimes 500 or 600 lbs. The pith is excavated, separated from the filaments in water, and reduced to a pulp, which is baked into cakes, and in this state forms a principal article of food in the Eastern baked into cakes, and in this state forms a principal article of food in the Eastern Islands. That which is imported, however, occurs in the form of grains, from having been passed through a coarse sieve, when half dry, upon hot plates of iron. Of this granulated kind there are two varieties—pearl sago, in small, hard, semitransparent grains, about the size of a pin's head; and the common or brown sago, in larger grains, about the size of pot barley. Both are inodorous, with an insipid taste. In many of its properties sago resembles starch. It is chiefly used as a light nutritive diet for children and invalids. The best sage is the produce of Siak in Sumatra; that of Borneo is next; and the produce of the Moluccas, though greatest in quantity, is lowest in estimation. The great emporium of the trade is Singapore. The annual consumption of this

The great emporium of the trade is Singapore. The annual consumption of this country—in 1820 only 1400 cwts.—is now upwards of 55,000 cwts., arising mainly from the reduction of the duty from 74s. 8d. to 1s. per cwt. 8

SAILCLOTH OR CANVASS (Du. Zeildock. Fr. Toile à voile. Ger. Segeltuch. It. Canevassa, Lona. Rus. Parussina. Por. & Sp. Lona.), a coarse strong fabric, woven of hemp or flax. It is made in bolts, each of 28 ells or 35 yards; and the qualities are numbered from No. 1, the strongest, used for storm sails, to No. 8, employed for the smallest ones, such as small studding sails, &c. Dundee is the chief seat of this manufacture in Britain. 8

ST HELENA, a small island of the S. Atlantic Ocean, subject to Britain. This unimportant island, which is only about 101 miles in length by 65 in breadth, derives its interest solely from having been the scene of Napoleon's imprisonment and death (1815-1821). The shores are rocky, and the interior is a lofty plateau, with a climate mild but unhealthy. At present it is chiefly used as a place of refreshment for ships proceeding northward; and its commerce consists in the importation of ship-stores, not exceeding £20,000 a-year. The only town and port is Jamestown, in lat. 18-18 ft. [ong. 5 46 W., about 570 leagues N.W. from the Cape of Good Hope. SAL AMMONIAC. [AMMONIA.]

SAL AMMONIAC. [AMMONIA.]
SALE is a contract by which the proprietor of some valuable commodity engages to transfer his property therein to another person, in consideration of a sum of money, called the price. The person who sells is called the vendor or seller, he who buys the vender or purchaser. The essentials of the contract are—that there be a subject, that there be a price ascertained or ascertainable through some means agreed on, and that the parties be capable of contracting. The parties must be at one as to the subject; for where A intends to sell malt, and B thinks he is purchasing corn, whatever claims may lie between the parties, there is no sale. If the agreement be founded on a fraud, it is void. The most ordinary description of fraud is deception or misrepresentation as to the state of the property. If the purfraud is deception or misrepresentation as to the state of the property. If the purchaser is aware, however, that a statement is a misrepresentation, it would appear that he is bound to the bargain; for the fraud, though intended, has not been his inducement to purchase. Stipulations that sales shall not be void through misstatements, and that the property must be taken with all faults, seem only to cover ordinary defects, but not to protect the purchase in the case of deliberate fraud. Where goods are sold by sample, they must correspond in quality. Concealment may be a fraud, as well as misstatement; as, where a picture is sold among others which have belonged to an eminent connoisseur, the purchaser being led into the mistake that it belonged to his collection. It is a fraud to take advantage led into the mistake that it belonged to his collection. It is a fraud to take advantage of imbecility or inebriety. "It seems to have been formerly held, even in equity, that of imbecility or inebriety. At seems to nave occurrency near, oren in equity, some a party entering into a contract when in a state of intoxication, was not entitled to relief, unless some fraud or contrivance had been practised by the other party; but probably the contract would now be held void if the defendant could show that he was so drunk at the time that he did not know what he was doing, although the drunkenness was entirely his own act" (Morton, 135). There may be fraud on the side of the purchaser, which will vitiate the sale; but his side of the contract does not admit of so many varieties of deception; and it is very seldom that his act can be shown to have affected the foundation of the contract. If a man puract can be shown to have affected the foundation of the contract. If a man purchase goods, and, having money sufficient to pay for them, spends the money otherwise, in the full knowledge that he has no other resource from which they can be paid, it is undoubtedly a fraud; but the contract is completed before it is done. There may, however, be circumstances showing a direct fraudulent design at the time of the purchase; as, where payment is given in a fictitious bill or in a draft on a banker with whom the purchaser has no funds. In such a case, money or its equivalent being the consideration on which the vendor agrees to sell, and worthless paper being substituted, the contract is void; and if the goods have changed owners, they may be reclaimed. When a fraud is discovered, if the party wishes to be rid of the bargain, he ought to take immediate steps for recovering what he has parted with; if he endeavour in the mean time to get the bargain otherwise performed, he will probably involve himself in a new contract. Thus, in the case of a fictitious draft, if the seller, instead of re-demanding the goods, were to endeavour to get payment for them, he would be held merely as placing the contract on a different footing. A sale procured by force is vitiated. Sales involving a fraud against third parties, for immoral purposes, and contrary to public policy, are void. [Contract.]

There are certain requisites of the article sold, generally termed Implied warranties, in opposition to Express warranties, which are explained below. There

warranties, in opposition to Express warranties, which are explained below. There

can be no implied warranty, however, as to the general qualities of the article. Of these it is the purchaser's duty to satisfy himself. In ordinary language, "his eye is his merchant;" and implied warranties resolve themselves into two conditions,—lst, That the subject is the vendor's own and at his free disposal; and, 2d, That it is what he sells it for. A thing stolen or found is not at the lawful disposal of the thief or finder, or of any person deriving right through them; but in England there is an exception in favour of a fair purchaser in market overt or in open market. In the city of London, every day except Sunday is a market day; and every shop or place in which goods are exposed for sale is the market, in as far as respects the kind of goods there sold. A wharf in London is not a market overt. In Bristol, and wherever a special custom to that effect is established, shops are market overt for their particular commodities; but in the country, generally, market overt is only held on particular days, and in a particular spot. A sale in a back room or warehouse, or in a room shuttered up, or during the night-time, will not give the protection of market overt; and if the purchaser is aware of the bad title, the sale is vitiated, wherever it takes place. The doctrine of market overt does not extend to Scotland. There "the possessor of goods which have been stolen by him, could not make a valid sale of them in any circumstances, because by our law no such privilege is attached to sales in open market as in England; and the seller never having had a title to the property of the goods sold in himself, could not give such a title to a purchaser "(Brown on Sale, 29). As to the other implied warranty, that the subject is what it is sold for, it is now no longer law that the amount of the price infers a warranty that the goods shall be of a certain quality. Where it is consistent with commercial practice to specify any particular kind of defect, omission to state it is held a warranty of soundness. Where the arti

chaser is aware of its falsehood or not.

Form.—The essentials of sale are—that the parties consent to the bargain; and, in the general case, evidence of that consent completes the transaction. In some cases, however, the law has required certain formalities, without which no sale takes place. Real property cannot be sold in any part of the kingdom without the intervention of writing. The Registration Act provides specifically a form, which cannot be departed from, in the vendition of ships, which will be found fully set forth in the abridgment of that act. In other respects, the contract of sale is in Scotland open to verbal evidence of consent: in England, however, it is regulated by the Statute of Frauds, 29 Ch. II. c. 3, as follows:—By § 17, "no contract for the sale of any goods, wares, and merchandises, for the price of £10 or upwards, shall be good, except the buyer shall accept part of the goods sold, and actually receive the same, or give something in earnest to bind the bargain, or in part of payment; or that some note or memorandum in writing of the said bargain be made and signed by the parties to be charged by such contract, or their agents, thereunto lawfully authorized." By 9 Geo. IV. c. 14, § 7, this section is extended to sales, "notwithstanding the goods may be intended to be delivered at some future time, or may not, at the time of such contract, be actually made, procured, or provided, or fit or ready for rendering the same fit for delivery." Sales by auction are ruled by the statute. [Aucrion.] "It is said that a sale of stock is within the statute, though this has been doubted, because there can be no actual delivery" (Morton, 53). It would appear that sales of shares in public companies are not within the statute. The delivery must be accompanied by acceptance on the part of the purchaser; so, where one ordered several articles in a shop, some of which he marked with a pencil, while others were measured in his presence, and in pursuance of his directions the whole were sent to his house,

the purchaser, such as a carrier, if with the purchaser's knowledge and assent, is sufficient. Earnest is another alternative. It must consist of the giving away of something valuable, and not of a mere sign or ceremony, such as crossing the hand with a shilling. Another criterion by the act, is a written note or memorandum of the bargain, signed by the parties or their agents. Much latitude is allowed in interpreting this provision. The meaning of a variety of documents may be taken conjointly to prove a sale; but parole evidence will not be admitted to control such meaning, though it may be employed to identify the handwriting. The price ought to appear in the writing, if it has been in the view of the parties. It is not necessary that the signatures should be the formal autographs at the end of the document which generally receive that designation. "I, A B, agree to sell," or "Mr A B has agreed," &c., is a sufficient signature by A B. The names of both parties must appear on the writing; but the signature requires to be only by the party charged. An agent signing need not be authorized in writing. [Principal and Adent.] An auctioneer is an agent in the meaning of the statute. [Auction.]

must appear on the writing; but the signature requires to be only by the party charged. An agent signing need not be authorized in writing. [Principal and Agent.] An auctioneer is an agent in the meaning of the statute. [Auction.] Delivery.—According to Blackstone, "as soon as the bargain is struck, the property of the goods is transferred to the vendee" (ii. 448). The seller is after that their mere custodier; and if they perish their loss falls on their new proprietor, viz. the purchaser. In Scotland a different doctrine is followed, in pursuance of the civil law. There "the property of the thing sold is not transferred from the vendor to the vendee by the mere operation of the contract. . . . Delivery is necessary to change the property "Brown, 3). The distinction, however, is little more than nominal. In England, the seller retains a lien on the thing sold for the price, and thus obtains the remedy which he has in Scotland by continuing to be the proprietor; and in both countries, goods continuing in possession of the vendor after he becomes bankrupt, accrue to the benefit of his creditors. The removal of the goods, at however short a period before bankruptcy, will be sufficient in the case of bulky articles, but it must be of a more distinct nature than the sort of delivery required by the Statute of Frauds to complete the contract. Transfer of the name in the books of a wharfinger, the assignment of a bill of lading, or of any sort of transfer-ticket, is delivery. It would appear that a marking of the purchaser's initials will not transfer the goods in the seller's warehouse; but that such an act of appropriation as bottling wine in the premises of the seller, and sealing the bottles with his (the buyer's) seal, will be sufficient. Possession by an agent is possession by his principal. The seller may specifically appropriate the goods to the purchaser, by giving directions to transmit them, and may thus take them out of his bankrupt estate. When the goods are in the hands of the purchaser or his agent, th

ship being exercised over them.

Price, &c..—It is the duty of the seller to perform his share of the contract, by delivering the property, or giving the purchaser all facility in taking possession; and if he refuse, the purchaser may in England bring assumpsit for non-delivery. In doing so he must prove that he has performed all the conditions incumbent on him; and especially that he has paid, or tendered payment of the price, unless the sale be on credit. In this latter case the vendor has no lien, and cannot refuse delivery, except in the circumstance of the goods being left in his possession until the period of credit expires. It is the duty of the purchaser first to take delivery of the goods, and then to pay for them. The vendor, if he have performed his own share in the contract, may sue him, for goods bargained and sold, if the property be delivered, in which form he will recover his entire price, or specially upon the contract, in which case he will recover the amount of damages which he has actually sustained. In Scotland, there is no such distinction in the form and effects of the action, which is, in all cases, an ordinary suit for performance of the contract, or for damages, the result being moulded to the circumstances. If credit is stipulated for, an action for goods sold cannot be brought until the period of it has expired, even though the vendee should have left unperformed some special condition stipulated for in the mean time (as, that he shall give a particular bill) or though he have given unequivocal tokens of a frandulent intention not to pay; the remedy in such case is an action of trover for recovery of the goods, on the nullity of the contract, as above. If the purchaser show that he has taken the proper means to effect payment, it will lie on the vendor to show that he has not been paid, by proving that the money intrusted to a carrier did not come to hand, or that a bill sent in

payment was dishonoured. If the vendor have taken a bill, he gives credit, and cannot recover on the original transaction, until the bill is dishonoured, unless it be fictitious, or be otherwise unavailable, as, for want of a stamp. If the bill be lost, the seller can sue on the original contract, securing the vendee against having to pay the amount to a third party. If the seller have given directions for transmitting the money in a particular manner, the buyer, by complying with the directions, and using all due caution, relieves himself of responsibility,—any loss which may occur falling on the seller; as, where it was agreed that the purchase-money should be transferred in the books of the mutual banker of the parties, whethereafter failed (Eyles v. Ellis, 4 Bingh. 112). Payment to the proper agent of the seller will release the buyer. When no price is named, the market price, or, as it would seem, the lowest price at which such goods are sold, will be the criterion: if the vendee take means to suppress information on this point, the presumption will be in favour of a high price. [Factor. Principal and Agent.]

(Morton on Vendors and Purchasers. Smith's Mercantile L., 393-431. Brown on Sale.)

SALEP, an alimentary powder obtained from the dried roots of the Orchis plant

SALEP, an alimentary powder obtained from the dried roots of the Orchis plant (Orchis mascula). It is a common article of diet in Turkey and Persia.

SALMA, a measure of capacity in Malta, Naples, and Sicily.

SALMON, a fish (Salmo ealar) common in the rivers of Britain, Ireland, and other northern countries. When young it is called "smolt;" "salmon peal" when a little older but under 2 lbs. weight; and "grilse" when still largar. When full grown it weighs generally from 6 to 12 lbs.; but it has been caught so large as 33 lbs. Salmon pass the summer in the sea, or near the mouths of the estuaries; in autumn they instinctively ascend the rivers, and deposit their spawn in the upper and shallow pools about the end of the season. After spawning they are unfit for food. They descend the rivers with the floods at the end of winter or beginning of spring, and ultimately gain the sea, where they quickly recover their condition. The first attack made upon them is in the summer months, when they rove close along the coast in quest of the rivers in which they annually cast their spawn. They are then, as well as in the estuaries, caught chiefly by stakenets; whereas in the rivers they are taken by coble-nets and other devices. The season of the migration of the salmon varies, depending, as some allege, on the warmth of the waters. The northern rivers are, with little exception, the earliest; the number caught in the spring is small compared with that taken as the summer advances.

The progress of population and manufactures has rendered the salmon scarce in England; but the fisheries in the Tay, Tweed, Don, Dee, and other rivers in Scotland, though less extensive than formerly, still send an annual supply of between 2,000,000 and 3,000,000 lbs. to London; and they continue plentiful in the Erne, Moy, Bann, Blackwater, Shannon, and nearly all the principal streams along the N. and W. coasts of Ireland. The fish are carried to town in a fresh state; packed in ice, from Scotland and Ireland; and the quantity pickled at the fishing stations is now exceedingly small. They are consigned to commission agents, who charge five per cent., and run the risk of all bad debts. The average wholesale price for the season in the metropolis is about 10d. per lb.

The salmon fishings are private property, and many of them are of great value.

enarge nive per cent., and run the risk of all dod debts. The average wholesale price for the season in the metropolis is about 10d. per lb.

The salmon fishings are private property, and many of them are of great value. Much discussion has frequently arisen regarding the duration of the close time and the modes of fishing in different parts of the rivers. In Scotland the prohibited period extends on the Tweed from October 15 to February 15; and north of the Tweed, from September 14 to February 1. Heavy penalties are imposed on the taking of spawn, fry, or unclean fish (24 Geo. II. c. 23; 9 Geo. IV. c. 39). S SAL PRUNELLA. [Niteate of Potash.]

SALT (Du. Zout. Fr. Sel. Ger. Sals. It. Sale. Por. & Sp. Sal. Rus. Sol), the muriate of soda or chloride of sodium of chemists, is a well-known substance, of the highest utility. It crystallizes in cubes. When pure it is not deliquescent. One part is soluble in 2½ths of cold water, and in little less of hot, so that it cannot be crystallized but by evaporation. Specific gravity, 2125. Salt abounds in various parts of the globe. The waters of the ocean every where contain it, though in different proportions. In England and elsewhere it is found in large masses, or in rocks under the earth. In other instances brine springs afford the means of a ready supply; and throughout a considerable part of the sandy districts of Africa and Asia, the soil itself abounds with it. Sca-salt is obtained in three ways; let, In countries having a long and hot summer, and a soil neither muddy nor porous, it is formed by solar evaporation from sea-water collected into pools. In this

manner it is prepared in Spain, Portugal (particularly at St Ubes), France, and various places on the Mediterranean; in India, Ceylon, Siam, Tonquin, and China; and from all these parts, except the last, large quantities are exported. 2d, In some countries, having a similar climate and soil, it is formed by solar evaporation in natural pools which spring-tides have previously filled with sea-water. This kind, chemically purer than that first described, is produced and exported in great quantities from the Cape de Verde Islands; from Turk's Island, and St Martin's in the West Indies; and from Kangaroo Island on the S. coast of Australia. In these places it is raked or scraped into a heap, and is at once fit for exportation. These two kinds of salt are known under the name of bay-salt. 3d, Salt is manufactured by artificial heat from sea-water; but the process is exfor exportation. These two kinds of salt are known under the name of bay-salt. 3d, Salt is manufactured by artificial heat from sea-water; but the process is expensive, and the result chemically impure. In this manner considerable quantities were formerly manufactured at Lymington in Hampshire, and various other places in this country; but, since the abolition of the duties, these works have been either about the results required to greatly required.

abandoned or greatly reduced

abandoned or greatly reduced.

In a commercial point of view, perhaps the most important source of supply consists of rock-salt and brine-springs. In England, the brine-springs and beds of rock-salt are of such extent as to be alone sufficient to supply the whole world for an indefinite period. They are situated chiefly at Northwich and other places contiguous to the river Weaver in Cheshire, and at Droitwich in Worcestershire. In these places the brine-springs, from which by far the largest supply of salt is obtained, have been worked from a very remote era; but the discovery and working of the fossil salt are comparatively of modern date. The produce of both kinds, however, has been of late vears much increased: and the English salt-trade is now an obthe fossil sait are comparatively of modern date. The produce of both kinds, nowever, has been of late years much increased; and the English salt-trade is now an object of great national importance. Besides the immense home consumption, upwards of 12,000,000 bushels, exceeding in value £200,000, are annually exported, chiefly to the United States, Canada, Russia, Prussia, Germany, Holland, Denmark, Belgium, and the western coast of Africa. Salt is of most extensive use as a preservative of food and as a condiment; as a source of soda, muriatic acid, and chlorine; and for various agricultural and horticultural purposes. Its comparative value is determined by its purity and its fitness for use. That kind which possesses most eminently the combined properties of hardness, compactness, and perfection of termined by its purity and its fitness for use. That kind which possesses most eminently the combined properties of hardness, compactness, and perfection of crystals, will be best adapted to the purpose of preserving provisions, because it will remain permanently between the different layers, or will be very gradually dissolved by the fluids that exude from the several substances; thus furnishing a slow but constant supply of esturated brine. On the other hand, for the purpose of preparing the pickle or of striking the meat, the smaller-grained varieties answer equally well, or, on account of their greater solubility, even better, provided they be equally pure. The tax on salt in Britain was formerly so high as 15s. per bushel; but in 1823 it was reduced from that rate to 2s.; and in 1825 it was wholly repealed. The retail price of the mineral has in consequence been reduced from 4½d. to ½d. per lb. SALTPETRE. [NITRATE OF POTASH.]

SALVAGE, in the law of shipping, is a remuneration to those who, by gratuitous exertion or risk, save a ship or cargo, or any portion of them, from destruction by the elements, or from loss by capture. It is not due to those who are bound by law and contract to exert themselves on the occasion; and thus the master and

law and contract to exert themselves on the occasion; and thus the master and crew can have no salvage for services in protecting their own vessel. When a vessel is captured, salvage is due on her recapture. Salvage is due, moreover, in cases where accident rather than exertion or risk has enabled the party to preserve the property; as, where portions of ship's apparel, anchors, or merchandise, are picked up at sea. Passengers are not in the general case entitled to any reward for assistance in saving the vessel, in the safety of which their own lives, or at least their comfort and convenience, are embarked; but the passenger is not bound like the mariner to stick to the vessel; and if he remain when he could depart, and perform gratuitous and perilous services, he is entitled to a consideration. "If the preservation of life can be connected with the preservation of property, whether by accident or not, the Court of Admiralty can take notice of it, but has no power of remunerating the mere preservation of life, which must be left to private bounty" (Abbot, 508). There is no rule for estimating the amount of salvage in all cases; nor, from the nature of the claim, does any fixed rule seem capable of being applied. Where the amount is disputed, the jury, or (as in the cases mentioned below) the justices, must consider the whole circumstances, an award accordingly. The master and crew of the vessel—the individuals, in short, who have exerted themselves or incurred personal risk—are those who are primarily entitled to the salvage allowance; but where their ship has been put in peril, or like the mariner to stick to the vessel; and if he remain when he could depart,

has suffered from wear and tear, the owners are entitled to a proportional compensation. Where third parties interfere to assist in a salvage, there must be a clear case of necessity for their aid, to justify their claim for a share of the salvagemoney: but it is a rule that, in case of preservation from an enemy, a vessel of war, if in sight, shares in the salvage. The property actually benefited is charged with the expense; and so freight is chargeable, if it was earned, and has been preserved by the act of the salvors.

When property wrecked or abandoned at sea is found and taken possession of, the finder has a lien on it till a reasonable salvage be tendered to him. Where, however, the parties whose right and duty it is to protect the property are present, other parties whose right and duty it is to protect the property are present, other parties are not entitled to take possession of it, or to interfere, except as assistants. By an old statute (12 Anne, stat. 2, c. 18), sheriffs, justices, mayors, bailiffs, heads of corporations, constables, head-boroughs, and tithing-men, are bound to give assistance at the call of the commander of a ship in distress on the coast, and to demand assistance from the people in the neighbourhood or from vessels at anchor. By the same act, the salvors in such a case must be paid a reasonable reward within 30 days,—the property saved remaining for security in the custody of the custom-house officers. If the parties disagree, they may name three justices as arbiters. By 26 Geo. II. c. 19, § 5, a similar remedy was given to parties voluntarily giving their services without being commanded by official persons.* In England, the jurisdiction in salvage cases, other than as above, is in the Court of Admiralty, where the service is performed at sea or between high and low water mark (I & 2 Geo. IV. c. 75, § 31). In Scotland, it is in the Court of Session. An act applying solely to England (I & 2 Geo. IV. c. 75) regulates the disposal of wrecked or abandoned property found at sea by pi disposal of wrecked or abandoned property found at sea by pilots and others; and applies the arrangement stated above of the arbitration of three justices to quesapplies the arrangement stated above of the arbitration of three justices to questions of salvage in such case, and to all disputes respecting remuneration for service done in the preservation of property or life on the coast. There is an appeal to the Court of Admiralty. There is a special statute, making similar provisions for the Cinque Ports (1 & 2 Geo. IV. c. 76). There are directions for the sale of goods to meet claims of salvage in the Customs Regulations Act. [Cusroms, § 49.] (Abbot on Shipping, 493-530; Statutes quoted.)

SAMPLE, a small specimen of any kind of merchandise.

SANDAL-WOOD, an aromatic wood, much used in India and China for cabinet-work, toys, and perfumes, also in medicine. It is obtained from a small tree (Santalum album), resembling the myrtle, found in Malabar, in Timor, and in the Sandwich and Fijee Islands; the produce of the first is that in most esteem. White sandal is the exterior part of the tree; and yellow sandal the interior. The last, which has most hardness and fragrance, should be selected in large pieces:

last, which has most hardness and fragrance, should be selected in large pieces: the billet nearest the root, called root sandal, is of superior quality. This commo-

dity improves by keeping.

SANDARAC, a resinous substance procured from a large tree (Callitris quad-

SANDAKAC, a resinous substance procured from a large tree (Calitriz quadrioulois) found in Temme in Morocco, where it is called arar. It occurs in yellowish-white tears, or in small masses; and is used as an ingredient in varnishes and incense, and, when reduced to a powder, forms the article called pounce.

SANDWICH or HAWAII ISLANDS, a group situate in the Pacific, betwixt lat. 18° 54′ and 22° 15′ N., and long, 199° 36′ and 205° 6′ E. They were discovered by Cook in 1778; and consist of 11 islands, of which 7 are inhabited. Population in 1836, 108,000. Government, an hereditary despotism.

in 1836, 108,000. Government, an hereditary despotism.

These islands are of volcanic origin, and in respect of climate differ little from the W. Indies, though they are more temperate. The soil is generally fertile; and the natives mild, honest, decile, and enterprising, having been reclaimed from the barbarous habits which formerly prevailed. The blands are favourably situated for trade, being in the route between America and China; and they have of late become an entrepôt for the commerce of the N. W. coast of America, as well as a place of refreshment for the whalers in the Pacific. The chief port is Honoruru, situate in Oahn, where consuls from Britain and the United States reside. It affords facilities for the repairing of ships. Imports—manufactured goods, sheathing copper, ship-stores and provisions, tea, sugar, skins, hides, lumber, furs, peari-shell, surtle-shell, arrow-root, and cocoanut oil. Exports—salt and sandal-wood, besides provisions and other supplies to whale-ships, and foreign merchandise re-shipped to California, the Russian settlements, Mexico, the South Sea Islands, Europe, and the United States. In 1835, the value of imports was £38,295; of exports, £292,073. The goods imported were brought by 34 vessels, the tonnage being 683; besides which, 70 whale-vessels visited the port. A commercial treaty was concluded between Lord E. Russell, captain of the Actson, and King Tamehameha III.

^{*} There is a question whether this is repealed by 6 Geo. IV. c. 105, § 100. There is a like provision in the 37th sect. of the 1 & 2 Geo. IV. c. 75, applicable only to England.

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SAPAN-WOOD, a dye-wood similar to Brazil-wood, but containing much less colouring matter. It is the product of a thorny tree (Casalpinia sapan), indigenous to S. India, Siam, Pegu, and the Eastern Islands; from whence about 16,000 bazar maunds were in the year 1838 imported into Calcutta, about one-fourth of which was re-exported to England.

SAPPAN-WOOD, a dye-wood similar to Brazil-wood, but containing much less colouring matter.

which was re-exported to England.

SAPPHIRE, a beautiful precious stone, and, after the diamond, the most valuable of gems. It occurs crystallized in six-sided prisms, variously terminated, and in rolled masses, which are colourless, or of a blue-yellow or yellowish-green tinge, and transparent or translucent. The most highly prized varieties are the crimson and carmine-red. The stones called oriental ruby, oriental topes, oriental amethyst, and oriental emerald, are red, yellow, violet, and green sapphires, distinguishable from the other gems of the same name, without the prefix oriental, by their superior hardness and greater specific gravity. It is found in Pegu, France, and Germany; but the finest are brought from Ceylon. The sapphire d'eau of jewellers is a transparent iolite from Caylon.

is a transparent iolite from Ceylon.

SARCOCOLLA, a gum resin produced in N. Africa, Persia, and Arabia, by a shrub, the *Pensa sarcocolla*. It occurs in small whitish yellow grains, of a bitter

is a transparent iolite from Ceylor.

SARCOCOLLA, a gum resin produced in N. Africa, Persia, and Arabia, by a shrub, the Peneae ascocolla. It occurs in small whitish-yellow grains, of a bitter taste, and is celebrated for conglutinating wounds.

SARDINES, a species of anchovy (Engravius meletta, Cuv.) common in the Mediterranean. It tapers very much towards the tail, and is of a dark brown colour. Sardines are frequently mixed with anchovies, but they are much inferior.

SARDINIA, KINGDOM OF, comprises the N. W. part of Italy, bounded N. by Switzerland, E. by Lombardy and Parma, S. by Gulf of Genoa, and W. by France; also the island of Sardinia in the Mediterranean. Area, 29,102 sq. miles. Population in 1838, 4,650,368. Capital, Turin, an inland city; pop. 114,000. Government, an hereditary monarchy, nearly absolute. S

Of the continental part, the most extensive and fertile is Piedmont, consisting of the upper basin of the Po, from which, and its affinents, the country, though naturally parched by heat, is a catestively and skilfully irrigated, that it yields surplus of corn, cattle, French beams, and hemps it schief other products are wine, fruit, and, above all, slik of the finest quality. Eavor, separate from the preceding by the Alps, is a poor hilly country. And the narrow maritime districts of Genoa and Nice, divided from Piedmont by the Apennines, are slo billy and rocky; but has a south aspect highly favourable for the olive. The mineral wealth of these territories has been little explored. Iron, lead, copper, and other metals are said to abound; and marble and alabater are both plentiful and largely exported. There are some iron-works; but the principal manufactures are those of slik, review, and hoelsy, mostly consumed in Italy, coarse woolens and linear, canvasa, cables, paper, glass, and socao day for most year and tunnies.

We posses no very recent or authentic account of the maritime commerce of the Sardinian states. It centres in Genoa, which, besides being the great seat of their export and imp

MEASURES, MONEY, FINANCES, &c.

MEASURES AND WEIGHTS.—In Genoa, the bracelo of 2 palmi = 22-69 lmp. inches; the canna piccola used by trademen = 9 palmi, and the custom-house canna = 10 palmi. The messarois wine measure of 5 barili or 100 pints = 35-67 lmp. gallons; the oil barile of 4 quarti or 64 quarteroni = 14-23 lmp. gallons. The corn mina of 9 quarti or 96 gombette = 3-31 lmp. bushels. 100 lbs. peeo sottile (used for commodities of small bulk) = 69-56 lbs. avoird.; 100 lbs. peeo grosse = 76-88 lbs. avoird.; the rottolo = 14 lb. peeo grosse.

dities of small bulk) = 69-68 bs. avoird.; 100 lbs. peec grosso = 76-88 lbs. avoird.; the rottolo = 14 lb. peec grosso.

In Turin, the rase or ell = 23-60 Imp. inches.
In Turin, the rase or ell = 23-60 Imp. jards; and the Piedmontese mile = 2771 Imp. yards; and the Piedmontese mile = 2771 Imp. prods nearly. The brents of 6 rubbi = 12-41 Imp. roods nearly. The brents of 6 rubbi = 12-41 Imp. gallons; the carro of oil is 10 brents. The pound of 1½ mark = 5693 troy grains; and 4 rubbl, or 100 lbs. = 81-33 lbs. avoirdupois.

In Nice, the ell = 46-77 Imp. inches; the charge, liquid measure, of 19 rubbl, = 30-75 Imp. gallons; the charge, com measure, of 4 setiers, = 4-40 Imp. bushels; the quintal of 6 rubbl or 150 lbs. = 103-14 lbs. avoirdupois.

SARDONYX, a species of agate; bein

In Capitari, the raso or ell = 21:63 Imp. inches. The restiere, corn measure, of 3 starell, = 4:04 Imp. bushels. The cantaro of 4 rubbi, or 104 lbs., = 91 lbs. avoirdupois.

MONEY.—Accounts are now generally stated in Italian livres (or first reacce), of 100 centesimi. The lira nuova is a silver coin, equal in value to the French franc, or 9½d. sterling. The other coins, since 1837, have also been similar to those of France.

of France.

Prior to 1837, accounts were stated in Genoa in lite fuori banco of 20 soldi or 240 denari; and 5½ fuori banco were reckoned equal to 1 pexas of exchange. 5 lite nuove = 6 lite fuori banco.

The usance of bills from London is 3 months' date. There are no days of grace; but 30 days are allowed to the holder of a bill to demand

are allowed to the holder of a bill to demand payment.

In Capitari, accounts are stated in lire of 4 reali, or 20 soldi; and 10 reali, or 22 lire, = 1 scudo, worth about 3s. 74d. sterling.

FINANCES.—The Revenue in 1839 was about £3,980,000; and the expenditure nearly the same. Debt, £5,800,000; bearing interest at 4 and 5 per cent. The credit of this state is high, owing to the progressive liquidation of the debt, and the punctual payment of the interest.

SARDONYX, a species of agate; being a variety of onyx, in which the opaque white alternates with a rich deep orange brown, of considerable translucency; and as this is of rare occurrence, the sardonyx is of greater value. The finest are

and as this is of rare occurrence, the sardonyx is of greater value. The finest are brought from the East.

SARSAPARILLA, the root of different species of Smilax, an evergreen climbing shrub, growing in the tropical parts of America. It is several feet in length; about the thickness of a quill, with joints at short distances. The cuticle is brown; the cortical part or bark, in which the virtues solely reside, is white, gray, or reddish, and of considerable thickness; the wood and pith are white. It has a glutinous bitterish taste, and no smell. The commercial varieties are—1st, Honduras, composed of very long roots, often doubled in the bundles; 2d, Jamaics, distinguished by its red colour, and the presence of its radicles; 3d, Brazilian or Lisbon, without radicles, in bundles, and more dressed than the others; 4th, Caraccas, also much dressed. Sarsaparilla scelebrated for its use in chronic syphilitic, rheumatic, gouty, and cutaneous

and more dressed than the others; 4th, Caraccas, also much dressed. Sarsaparilla is celebrated for its use in chronic syphilitic, rheumatic, gouty, and cutaneous diseases; and about 140,000 lbs. are annually entered for home consumption. SARSNET, a plain silken fabric, now chiefly employed for linings. SASSAFRAS, a tree (Lauras sassafras) found in N. America, Jamaica, and Cochin-China, the root of which is imported for its use in medicine. It occurs in long branched pieces, spongy, of a rusty white colour, a smell resembling fennel, and a sweetish, aromatic, subacrid taste. It yields in distillation a fragrant essential oil, of a whitish-vellow colour, and so nonderous as to sink in water.

and a sweetish, aromatic, subacrid taste. It yields in distillation a fragrant essential oil, of a whitish-yellow colour, and so ponderous as to sink in water.

SATIN (Fr. Satin. Ger. Allass. It. Raso. Por. Setim.), a soft, closely woven, twilled, silken fabric, with a glossy surface. Figured satins are manufactured by means of the Jacquard machine, of the most beautiful textures and patterns. After being taken out of the loom they are dressed by being rolled on heated cylinders, which imparts to them the beautiful lustre for which they are distinguished. Chinese satins are esteemed for the quality they possess of being easily cleaned and bleached; but in other respects they are inferior to those manufactured in Europe. The finest satins have long been made in Spitalfields. [Siek Manufacture.]

SATIN-WOOD, a cabinet-wood, well known for its glossy yellow shades. It occurs in logs of 2 feet wide, and 7 or 8 feet long; but is now little useful SAUNDERS-RED, a heavy insipid dye-wood, the product of a useful timber tree (Pterocarpus santalinus), found in Malabar, Mysore, Timor, and Ceylon. It is imported occasionally in large billets, of a reddish colour. It communicates a deep red to alcohol, but gives no tinge to water.

red to alcohol, but gives no tinge to water.

SAWS (Fr. Scies. Ger. Sagen. It. Seghs. Por. Serras. Rus. Pili. Sp. Sierras),

wall-known instruments manufactured on a great scale at Sheffield, from whence they are sent to all parts of the world. [IRON MANUFACTURES.]
SAXONY, an inland German kingdom, lying between the Prussian and Austrian states. Area, 5759 sq. miles. Population in 1840, 1,706,276. Capital, Dresden; pop. 70,000. Government, a constitutional monarchy, with a senate and house of representatives. S

SEA

The country is traversed by the Eibe, navigable throughout for barges. The 8, frontier is mostly formed by the Brzgebryc or Ore Mountains, the undulations and ramifications of which extend over the greater part of the country; though leaving a level tract along the N. part of the kingdom. Every apot capable of yielding a return is cultivated; but, except her celebrated wool, no agricultural produce is exported, owing to the great density of the pupulation, which is chiefly engaged in mining, manufactures, and commerce. The principal metals are sliver and iron; with lead, bismuth, arrenic, antimony, cobalt, and manganese: coal also is worked near Dreeden. Of manufacturing industry the most important branch is that of cotton, which, as well as the others, has greatly expanded of late years, owing partly to the extraordinary cheapness of labour which has strended the extension of potato cultivation, and partly to the markets of Prussia and other parts of Germany having been opened up to the manufacturers by the Zollversin, which has benefited according to the produced of the years, owing partly to the markets. The chief other manufactures are those of lineas and woollens; but almost every article of luxury or use is made in Saxony, which, in respect of industry and civiliation, is the most advanced of the German stace.

Saxony being now, commercially, united to other states by the Zollversin, we can give few details regarding its individual trade. It consists mainly in exchanging its manufactures, mineral products, and wool, for corn, salt, raw cotton, yarn, silk, flax, hemp, paper, fish, tropical products, and wool, for corn, salt, raw cotton, yarn, silk, flax, hemp, paper, fish, tropical products, and wool, for corn, salt, raw cotton, yarn, silk, flax, hemp, paper, fish, tropical products, and wool, far extense brought for the supply of other parts of the Continent. Of these fairs there are three;—New Year's Fair, which begins January 1; Easter or Jubliate Fair, on the third Bunday after Raster; and Michasimas F

are the greatest. Besides merchants from all parts of Europe, these fairs are frequented by all the German booksellers,—Leipzic, after London and Paris, being the chief literary mark of the world.

Measures and Weights.—Theell = 32:30 lmg.

lib. = 115:32 lbs. avoirdupois. The mark = inches, and 100 elis = 61:96 lmp. yards. The saxon or police mile of 3000 ruthes = 9914

Imp. yards. The morgen or acre of 300 square perches = 1 lmp. acre, 1 rood, 18 poles. The siner, liquid measure, of 72 kannes, = 14:94

Imp. gallons; the ahm is 2, the oxhoft 3, the fass 6, and the fuder 12 elimers. The corn scheffel = 2:859 lmp. bushels; and the wispel of 2 malters, or 94 scheffels = 8:86 lmp. quarters; the last of wheat or rye contains 6 wispels; the last of barley or oats, 2 wispels. The centner of 110

SCAMMONY (Arab. Sukmoonia. Fr. Soammonés. It. Scammones), a medicinal resin, resembling jalap, is the inspissated juice of the root of a plant (Convolutus scammonia) indigenous to Syris. Three kinds occur,—Aleppo, the best, in spongy masses, of a glossy dark ash colour, peculiar heavy odour, bitter acrid taste, friable, and readily converted into a light gray powder; Smyrna, secondary; and Antioch, of very low quality. Nearly 7000 lbs. are annually consumed in the U. K. SCANTLING, a general name for small timbers, such as the quartering for a partition, rafters, purlins, or pole-plates in a roof. All quartering or squared timber under five inches square is called scantling. The same term is used in carpentry, to express the transverse dimensions of a piece of timber; and in masonry, to designate the size of stones, in length, breadth, and thickness. SCHOONER, a vessel generally with two masts, and having all her lower sails fore and aft ones, i. s. in their usual position, in vertical planes passing through the keel: it has small or no topsails.

SCRIP. [Funns.]

SCUDO. a coin and money of account in Rome. Sicily, and Malta.

SCRIP. [FUNDS.]

SCULPTURES. By the act 54 Geo. III. c. 56, copyright is constituted in sculpture, in so far as respects publication by casts. It exists during fourteen years from the first publication; and, at the end of that time, for another similar period if the artist be alive and have not disposed of his right. The name of the proprietor and the date must be marked on each cast or copy before publication. The ect 6 Geo. IV. c. 107, prohibits the importation of any sculptures first made in the United Kingdom.

SEAL, the name of a family of amphibious animals, one species of which, the common seal (*Phoca vitulina*), frequents the British shores, particularly the northwest of Scotland; though it is in the Arctic regions that they chiefly abound. The seal is gregarious, and is fond of reposing on ice-fields, situations where the greatest numbers are killed, chiefly for the oil obtained from their fat or blubber, greatest numbers are killed, chiefly for the oil obtained from their fat or number, which is preferred to that of the whale; though the animal is also valued for its skin, which is used, both with the hair on and when tanned into leather, for a variety of purposes. The seal-fishing is chiefly prosecuted from Newfoundland, Nova Scotia, and the United States; but whalers always take out seal-clubs as part of their equipment, the animal being most readily despatched by a blow on the nose; and one ship has been known to obtain a cargo of from 4000 to 5000,

yielding nearly 100 tuns oil. The gigantic walrus, belonging to the same class, is killed for its ivory tuaks, as its carcass yields but a small proportion of oil; the chase of them, therefore, only constitutes a third-rate object in whaling voyages. SEALING-WAX (Fr. Cire à cacheter. Ger. Siegellack) was anciently formed in England of bees-wax and resin; but since the introduction into European trade of shellac [Lac], the most adhesive of the gum-resins, the finer kinds have been principally composed of that material; adding camphor to make it ignite freely, and vermilion, lampblack, or some other colouring matter. Coarse wax consists chiefly of common rosin. And there are a variety of intermediate sorts, in which shellac and rosin are blended with colouring and other substances, according to the purposes intended. Spain and Holland were formerly distinguished for their sealing-wax; but it has long been manufactured in this country, princiaccording to the purposes intended. Spain and riomand were formerly distinguished for their sealing-wax; but it has long been manufactured in this country, principally in London and Edinburgh.

SEALS (Fr. Cachets. Ger. Petschafts. It. Sigilli. Por. & Sp. Sellos), for impressing letter-wax, and other soft substances, are usually formed of stone or metal, on

SEALS (Fr. Cachets. Ger. Petschaffs. It. Sigilis. For. & Sp. Settos), for impressing letter-wax, and other soft substances, are usually formed of stone or metal, on which some device is engraved. The finest, composed of precious stones set in gold, are made in London and other towns. But immense quantities formed of stained glass, fixed in gilt copper, are manufactured, both for home consumption and exportation, at Birmingham,—the great seat of this kind of bipouterie.

SEAMEN, persons employed in navigating sea-going vessels. The laws for the regulation of those engaged in the British merchant-service were formerly the subject of numerous statutes, but in 1835 these were consolidated by 6 & 6 Wm. IV. c. 19, which also provided for forming and maintaining a Register of Seamen. An abstract of that act is given below. It includes regulations for the payment of their wages; but these do not deprive them of their lien on the ship, and other ordinary legal remedies. Their right to receive wages, however, depends, to a certain extent, on the successful termination of the voyage. It is said to be a general rule, that no wages are due where no freight is earned by the vessel, or that "freight is the mother of wages;" but the conclusion depends on the circumstances which have prevented freight from being earned. Where these have arisen from the acts or negligence of the owners or master, or of the persons with whom they have contracted for a cargo, the wages are not lost. Capture defeats the right of the seamen, which revives on recapture. Entire loss by shipwreck defeats the claim; but if any part of the cargo is saved, and freight earned by it, the seaman will have a claim for a proportional part of his wages; and it has been held in England, that mariners are entitled to wages from the proceeds of any parts of the vessel which their exertions are the means of preserving. (Holl's Shipping and Navingation Lang. 1826. p. 266-294. Abhat on Merchant Ships and Seamen. of the vessel which their exertions are the means of preserving. (Holt's Shipping and Navigation Laws, 1826, p. 266-294. Abbot on Merchant Ships and Seamen, (6th Edition,) 540-598. Bell's Commentaries, vol. i. p. 509-519.)

Abstract of the Merchant Seamen's Act, 5 & 6 Wm. IV. c. 19 (July 30, 1835).

A Betract of the Merchant Seamen's Act, 5 & 6 Wm. IV. c. 19 (July 30, 1835).

§ 1. After 31st July 1835, the following acts, 2&3
Anne, c. 6, 2 Geo. II. c. 36, 2 Geo. III. c. 31, 3 Geo. III. c. 39, 46 Geo. III. c. 31, 37 Geo. III. c. 39, 46 Geo. III. c. 58, repeate with the collector or comptroller of the post with the ship belongs a true copy of c. 73, 58 Geo. III. c. 58, 46 Geo. IV. c. 28, 3 & 4 Wm. IV. c. 88, and 59 Geo. III. c. 58, repeate with the ship belongs a true copy of very agreement entered into with any part of the trading to parts beyond the seas, or of any Bertinder of the contents of the agreement, when trading to parts beyond the seas, or of any Bertinder of the contents of the agreement, when trading to parts beyond the seas, or of any Bertinder of the contents of the part of any seaman. § 4. The penalty for not entering on the agreement, when the proof of the contents of the part of any seaman. § 4. The penalty for not entering on the agreement when the place of shipment. The agreement must be distinctly read over to each seaman before he sign, by or in the presence of the person who attests his subscription.

is atheription.

§ 3. Except as after provided, every agreement must be in the form of schedule A of the act; and the owners and the master, or one of them, on reporting his ship arrival, must deposit with the collector or comptroller of customs a copy of the agreement, attested by the master. In the cases of ships employed in fishing on the coasts, or regularly trading coastwise, and of ships making regular voyages to Jersey, Guernasy, Alderney, Sark, or Man, or to any port on the continent between the Eibe and Hrest, the agreement must be in the form of schedule B; and an owner must, within 10 days after the expiration of every 6 months ending on the 30th

we have been mariner taken on board; that for not causing it to be read over, £5 for each; and that for not depositing a true copy with the collector or comptroller, £50.

§ 5. The agreement not to deprive seamen of their lien upon the ship, or other remedies they are now entitled to; nor is any covenant contary to or inconsistent with this act, or any clause whereby a seaman shall consent to forege the right which the maritime law gives him to wages in the case of freight earned by ships subsequently lost, or containing any words to that effect, valid. Seamen are not bound to produce the agreement to sustain their claim.
§ 6. If a seaman who has signed an agreement

the agreement to sustain their claim.
§ 6. If a seaman who has signed an agreement fail to join, or refuse to proceed in the ship, or absent himself without leave, any justice near the place may, upon complaint, cause such seaman to be apprehended, and upon due proof, committed to gaol for a period not exceeding 30 days. But if the seaman, on being brought be-

fore the justice, consent to join the ship, the justice, at the request of the master, instead of committing him, may cause him to be conveyed on board, or to be delivered to the master, and also to award to the latter reasonable costs, not exceeding 40s., which may be deducted from the seaman's wages.

§ 7 Enacts a forfeiture for temporary absence from duty of 2 days "pay for every 24 hours of absence, and in a like proportion for any less period, or, at the option of the master, the expenses necessarily incurred in hiring a substitute. There is a

or, at the option of the master, the expenses necessarily incurred in hiring a substitute. There is a like forfeiture if the seaman, "without sufficient cause, neglect to perform such his duty as is resconably required of him by the master;" and if, after the ship's arrival at her port of delivery, and shofore her discharge, he quit the ship without a discharge or leave from the master, he forfeits a discharge or leave from the master, he forfeits month's pay. But no such forfeitures are incurred unless the fact of the temporary absence, neglect of duty, or quitting the ship, he recorded in the log-book, with specification of the hour of the day, and the period of absence or neglect, the truth of which entry it is incumbent on the owner or master to substantiate by evidence.

§ 8 Describes the mode in which the forfeiture is to be ascertained when seamen contract by the voyage and not by the month.

- owner or master to substantiate by evidence.
 § 8 Describes the mode in which the forfeiture to be ascertained when seamen contract by the voyage and not by the month.
 § 9. Every deserter forfeits all his clothes and effects on board, and all emoluments, provided the circumstances be entered in the log-book at the time, and certified by the signature of the master and mate, or other credible witness. Absence for any time within 24 hours of sailing, without permission, or for any period, however short, under circumstances plainly showing his intention not to return, is deemed desertion. If such desertion take place beyond seas, and the master be under the necessity of engaging's substitute at higher wages, the owner or master is entitled summarily to recover the increased amount from the deserter.
 § 10. Penalty for harbouring deserters, £10: and no debt (incurred after agreement) exceeding as, recoverable from a seament selfects be detained by lodging-house keepers under pretence of debt.
 § 11. Masters and owners must pay wages when demanded, as follows, vis. If the ship be employed coastwise, within 2 days after the terminations of the agreement, or at the time of discharge, whichever first happen; and if the ship be employed in trading otherwise, at the latest within 3 days after the discharge, whichever first; in either of which last-mentioned cases of payment being delayed, the seaman is at the time of discharge whitchever for refusal, forfeit to the seaman? days' pay for each day not exceeding 10 days of delay; for the recovery of which, the seaman has the same remedies as for the recovery of his wages. The clause does not extend to ships in the southern whale-fishery, or on voyages for which seamen are compensated by shares in the profits.
 § 12. Every payment of wages is valid notwithstanding any bill of sale or assignment or sale of wages made prior to the earning, and no power of attorney expressed to be irrevocable for the receipt of wages, is binding.
 § 14. If after a seaman has been discharged 3 days,

his wages, any justice, on estisfactory proof that he would be prevented from employment by delay, may summon the master or owner, and order payment forthwith; penalty for default; £5. § 16. As to recovery of wages, in all cases not exceeding £50, a justice, upon complaint on oath, may summon the master or owner, and make such order for payment as rhall appear just, and levy the amount by distress and sale of the goods and chattels of the party; and in case sufficient distress cannot be found, the justice may cause the amount to be levied on the ship, or the tackle and apparel thereof. If the ship be not within the jurisdiction of the justice, he may cause the party to be imprisoned till payment. The justice's decision is final. § 16. Costs of suit for recovery of wages not to be allowed, if sued for in the superior courts, when they night have been recovered before a justice.

justice.
§ 17. When the ship is sold at a foreign port, the crew (unless consenting to be there discharged) are to be sent home at the expense of the master or owners.

or owners.
§ 18. Medicines to be kept on board, and seamen hurt in the service of the ship to be provided with surgical advice gratis.
§§ 19 & 20 Provide for the establishment of a

§§ 19 & 99 Provide for the establishment of a General Register of merchant seamen, at the Custom-house, London.
§ 21. The master of every British ship trading abroad (except as mentioned below), besides keeping the book required by 4 & 5 Wm. IV. c. 52 (which provides for the support of sick and disabled seamen), must, on reporting his ship on her arrival, deliver to the collector or comprision to the port, an account of all the crew who have belonged to the ship at any time during her absence.

who have belonged to the ship at any time during her absence.
§ 22. Within 21 days after the 30th June and the 31st December in each year, the owner of every ship employed in fishing or trading on the coasts, or making regular voyages to any port of Europe between the Elbe and Brest, must deposit with the collector or comptroller of the port to which the ship belongs, or with the registrar in London, an account of the voyages in which the ship has been engaged during the preceding half-year, setting forth the names of the several persons who have belonged to the ship.
§ 23. If a ship be lost or sold while absent from the United Kingdom, the account must be made out up to the period of loss or sale, and transmitted by an owner or the master to the registrar in London, so soon as possible after a loss, and within 12 calendar months after a sale.
§ 24. The accounts and returns are to be transmitted.

aither of which last-mentioned cases of payment being delayed, the seaman is at the time of discharge entitled to be paid on account one-fourth part of the balance due to him. Masters and owners, for neglect or refusal, forfeit to the seaman say any pay for each day not exceeding 10 days of delay; for the recovery of which, the seaman has the sameremedies as for the recovery of his wages. The clause does not extend to ships in the southern whale-flabery, or on voyages for which seaman are compensated by shares in the profits.

§ 19. Every payment of wages is valid notwithstanding any bill of sale or assignment by the seaman of such wages, or any attachment or incumbrance thereon; and no assignment or rale of wages made prior to the earning, and no power of attorney expressed to be irrevocable for the receipt of wages, is binding.

§ 13. Masters to give seamen certificates on their discharge, specifying the period of service and the time and place of discharge, under a penalty of £8.

§ 14. If after a seaman has been discharged 3 days, he be desirous of proceeding on another voyage, and so require immediate payment of 180 tons and upwards, must have on board, at of 80 tons and returns are toss, and intended the time and place of discharged of discharged 3 days, he be desirous of proceeding on another voyage, and so require immediate payment of 180 tons and upwards, must have on board, at of 80 tons and upwards, must have on board, at of 80 tons and upwards, and returns are tost, and returns are to less than complete to the registrar. Every owner or master refusing or neglecting to deliver a list or master refusing or neglecting to deliver a list or master refusing or neglecting to deliver a list or master refusing or neglecting to deliver a list or master refusing or neglecting to deliver a list or master refusing or neglecting to deliver a list or master refusing or neglecting to deliver a list or master refusing or neglecting to deliver a list or master refusing or neglecting to deliver a list or master refusi

clearing out, one apprentice or more, in the following proportions to the tonnage, viz.:—Every ship of 80 tons and under 200, one apprentice at the least: every ship of 300 and under 400, two; every ship of 500 and under 700, four; and every ship of 700 and under 700, four; and every ship of 700 and under 700, four; and every ship of 700 and under 710, reason age, and shall have been under 17 years of age, and shall have been under 17 years of age, and shall have been bound for 4 years at the least. If a master neglect to have on board the proper number, he forfeits £10 for each apprentice deficient.

§ 32. Apprentices exempt from contributions for hospitals.

§ 33 and 34. Indentures and assignments of parish and other apprentices to be registered as therein mentioned. Apprentices may be employed in any ship of which their master is master or owner.

7 Where.
§ 36. Agreements, indentures, assignments, c., under the act, are free of stamp-duty.
§ 36. Penalty on masters neglecting to register identures, and for suffering apprentices to quit

their service. £10.

§ 37. Any two or more justices, at or near the port of arrival, have authority to determine com-

port of arrival, have authority to determine complaints between masters and apprentices.
§ 38. Common assults on board merchantships may be summarily punished by two justices;
and the fine shall be payable to the merchantseamen's hospital or institution nearest to the
port of adjudication.
§ 38. Masters entitled to receive the wages of
apprentices entering into the navy; which they
cannot do except with their master's consent.
§ 40. As mischief has arisen from seamen being
left in foreign parts, masters forcing on shore or
leaving behind any of the crew are subject to fine
and imprisonment.
§ 41 and 42. Seamen not to be discharged, nor

§§ 41 and 42. Seamen not to be discharged, nor left on the plean of described. left on the plea of describin, at any colony, with-out the written sanction of a government-officer; nor at any other place abroad, without the sanc-tion of the British consul or two respectable

merchants.
§ 43. If any of the crew are left behind, the proof of sanction or authority, as above, is to be upon the master in the case of dispute.
§ 44. Seamen when allowed to be left behind, are to be paid their wages, a true account of which shall be delivered by the master to the functionary or merchants, as aforesaid, under a penalty of £28. If wages be paid by a draft on the owners, the functionary or merchants must testify by certificate indorsed on the bill, that it is drawn according to this act for money due on account of wages of a seaman.
§ 46. Act not to prevent seamen from entering the navy; and no penalty can follow such entry.

§ 4d. Act not to prevent seamen from entering the navy; and no penalty can follow such entry. Agreements to the contrary void.
§ 4d. Upon entry of seamen into the navy from merchant-ships, they shall be entitled to the immediate delivery up of their clothes, and payment of any wages that may be due, according to the regulations prescribed.
§ 47. The crown empowered to sue for the amount advanced for the relief of seamen left abroad. In any proceeding for that purpose, proof of the account furnished to the commissioners by any functionary or merchants as above.

itogether with proof of payment by the navy department of the charges incurred, is sufficient evidence that such person was relieved and conveyed bome at his majesty's expense. The court in which such proceeding is instituted is authorized to issue commissions for the examination of witnesses abroad.

§ 48. Every master, on his arrival at any foreign port where there is a British consul or vice-consul, must deliver to him the agreement with his crew, to be preserved during the ship's stay there, and to be returned to the master before his leaving the port, without any fee or charge; and every master, for refusal or neglect to deliver, forfeits £25.

§ 49. During the ship's stay at any foreign port, no seaman can be shipped except with the privity of the consul or vice-consul, indoresd or certified on the agreement, under a penalty of £25 for every seaman otherwise shipped.

§ 50 and 51. Masters, when required, must produce agreements to officers of king's ships. Such officers may muster the crew; penalty on master for refusal, £25. Registrar and officer of customs may require production of the agreement and muster-roll, and muster the crew, under a penalty for refusal of £50.

§ 50. For the purposes of the act, every person having the charge or command of a ship is deemed the master, and every person (apprentices excepted) employed to serve in any capacity on board is deemed a seaman; and "ship, comprehends every vessel navigating on the sea, and the "owner," all to whom the ship belongs, and all steam and other vessels employed in carrying passengers or goods, are deemed trading-ships.

§ 53. Penaltics and forfeitures, for the recovery whereof no specific mode is provided, may be recovered, with coata, as follows, vix.—All penaltics, for which no specific application is provided, are to be applied as follows, viz.—One moiety to the informer, and the residue to be divided between Greenwich Hospital. The court may mitigate any penalty, but not below one-half. All proceedings must be commenced within two years ne

SEAWORTHINESS of a vessel, in the law of marine insurance, is an implied warranty on the part of the insured, or one of those conditions of the contract, the want of compliance with which renders it null. It is generally provided in the policy that the vessel shall be "tight, staunch, and strong, properly manned, provided with all necessary stores, and in all respects fit for the intended voyage." The seaworthiness must be adapted to the nature of the service, for what will suit a coasting voyage will not enable a vessel to proceed to India. Seaworthiness incoasting voyage will not enable a vessel to proceed to India. Seaworthiness includes the having a competent master and a sufficient crew, with a proper equipment of masts, sails, and anchors. If the vessel sail to a port where a pilot is necessary, the master must obtain one, or use every effort to do so; and having employed one, must not dismiss him within the fair way. It is a general rule, that it is of no consequence whether the owners or the master know of defects affecting seaworthiness or not. In one case, of which no very distinct report has been preserved (Mills v. Roebuck in Exch., see Park, 460; Marshall, 154), there was an apparent divergence from these rules; and so far as can be collected, the grounds appear to have been, that from the place of her build the underwriters had to expect inherent defects in the vessel's construction; and that they had nad to expect inherent detects in the vessel's construction; and that they had reason to know the progress of these defects from the representations made when the slip was signed. (Purk on Insurance, 8th edit., 458-496. Marshall on Insurance, 146-161.) [INSURANCE.]
SEER, an Indian weight. The E. I. C.'s new seer of 80 tolas = 2057 lbs. avoird. SEIGNORAGE, the profit derived from issuing coins at a rate above their in-

trinsic value.

trinsic value.

SENNA (Fr. Séné. Ger. Sennablater. It. Senna), a well-known medicine, composed of the leaflets and occasionally of the leaf-stalks and pods of several species of Cassia, cultivated in Arabia, Syria, and Egypt. About four-fifths of that brought to the English market is Arabian or Meoca senna, commonly called East India senna, from being shipped from Indian ports. It is the product of C. lancecolata; leaflets very narrow and acute. Other kinds are imported from the Levant; and at second-hand from Italy, under the designations of Alexandrian, Tinnivelly, Aleppo, and Tripoli senna. The Alexandrian (C. acutifotia) is the most valuable; but it is offen adulterated. About 200,000 lbs. are annually en-Tinnivelly, Aleppo, and Tripoli sena. The Alexandrian (C. acutifosia) is the most valuable; but it is often adulterated. About 200,000 lbs. are annually en-

tered for consumption in the United Kingdom.

SEQUESTRATION—Mercantile, in the law of Scotland, is the process by which the effects of a bankrupt trader are realized and divided among his credi-

tors, as by the process of bankruptcy in England.

The law on the subject is contained in the Statute 2 & 3 Vict. c. 41, of which what follows is an abridgment :-

what follows is an abridgment:—

Persons who may be sequestrated.—Any debtor "who is, or has been, a merchant, trader, manufacturer, banker, broker, warehouseman, wharfinger, underwriter, artificer, packer, builder, carpenter, shipwright, innkeeper, hotelkeeper, stable-keeper, coach-contractor, cattle-keeper, stable-keeper, coach-contractor, cattle-keeper, gain-dealer, coal-dealer, fish-dealer, lime-burner, dyer, printer, bleacher, fuller, calenderer, and generally any debtor who seeks, or has sought his living, or a material part thereof, for himself, or in partnership with another, or as agent or factor for others, by using the trade of merchandise, by way of bargain, exchange, barter, commission or consignment, or by buying and selling, or by buying and letting for hire, or by the workmanship or manufacture of goods or commodities." No one can be sequestrated as "a holder of stock in any of the public or national funds, or of India stock, or as a bardner in any company incorporated or established by act of parliament, or by charter, or as a landholder or farmer, unless such landholder or farmer, unless such landholder or farmer, unless such landholder or farmer, unless such landholder or farmer, unless such landholder or farmer to bom fifte a dealer in cattle not the produce of, nor grazed, nor worked on his farm, or unless he be a dealer in grain not the produce thereof" (§ 5). The debtor (unless he consent) must be bankrupt, must have carried on business within Scotland, and must have also within a very before the date of presenting the medition.

death resided, or had a dwelling-house, or carried on business in Scotland, and was at that time owner of heritable or moveable estates in Scotowner of heritable or moveable estates in Scott-iand; "but not until the expiry of six months after his death, unless he had granted a mandate to apply for sequestration, or was bankrupt when be died, or had remained in sanctuary for 60 days, at some time or other within the 12 months preceding his death, or unless his successor shall concur in the petition or renounce the suc-cessor.

preceding his death, or unless his successor habil concur in the petition or renounce the succession (§ 4).

Application, According, and Recall.—Sequestration may be awarded on the application of the debtor, with concurrence of creditors, or at the instance of creditors alone. Those creditor entitled to petition, or to concur, are—any one creditor whose debt amounts to £30, any two whose debts together amount to £70, or any three or more whose debts together amount to £70, or any three or more whose debts together amount to £100. The debts need not be liquid, but they must not be contingent. Application is made by petitione or his counsel. In the case of a petition without consent, it must be presented within four months after the bankruptcy, or, in case of retiring to the sanctuary, within four months after expiration of the 60 days. The petitioning or concurring creditor produces with it his oath, accounts, and vouchers. There are provisions for the petitioning creditor (in the case either of the debtor's decease or of his not concurring), specifying the circumstances which bring him within the range of the act (§ 12). Where the application is with consent of the debtor, the lord ordinary awards sequestration, and appoints a meeting to be held, not earlier than eight or later or times a conser in grain not use produce thereof" (§ 5). The debtor (unless he consent) must be bankrupt, must have carried on business within Scotland, and must have also within a year before the date of presenting the petition resided, or had a dwelling-house, or place of business in Scotland. Bankruptcy is not necessary where the debtor has been in the sanctuary, within the space of 19 months. A company may be sequestrated, provided (unless the company have been in the sanctuary) or not, within the space of provided (unless the company have been earlied on business in Scotland, and a partner have had a dwelling-house or the company have a place of business there within a year and day before the presentation of the petition. Secondary and the presentation of the position. Secondary have had been made bankrupt for a company debt, and the company have a carried on business in Scotland, and a partner have had a dwelling-house or the company have before the presentation of the petition. Secondary were a company debt, and the company have been made bankrupt for a company debt, and the company have been made bankrupt for a company debt, and the petition. Secondary have been made bankrupt for secondary where the application of the 60 days. The petitioning or continuity, within the space of 19 months. A company may be sequestrated, provided (unless the company have been and the same time and the content of the debtor's decease or of his not concurring), specifying the circumstances which bring him within the range of the act (§ 19). Where the application of the 60 days, and the case either of the debtor's decease or of his not concurring), specifying the circumstances which bring him within the range of the act (§ 19). Where the application is with consent of the debtor and the consent of the debtor and the consent of the debtor and the consent of the debtor and the consent of the debtor and the consent of the debtor and the consent of the debtor and the case either of the debtor and the consent of the debtor and t

against arrest or imprisonment for civil debt until the meeting for election of trustee. There are special provisions for giving notice to successors, in the case of a debtor deceased. Where the petition is without the debtor's consent, there are provisions for his being cited for his interest, and for the recovery of evidence as to the benkruptcy, dec. If he do not appear, or do not instantly pay the debt, or produce evidence of payment, to the creditors appearing against him, sequestration is awarded, meetings are appointed, and protection is granted as above. The party applying for sequestration, before expiry of the second lawful day after the first diverance, must present an abbreviate, to be recorded in the register of inhibition. The record has the effect of an inhibition, and of a citation in an adjudication, and so of tying up the bankrupt's property, till it is disposed of in course of law. The party must also insert a notice, within four days from the date of the deliverance, in the Edinburgh, and within eight days from the dest of the deliverance, in the Edinburgh, and within eight days from the dest of the deliverance, in the Edinburgh, and within eight days from the date of the deliverance, in the Edinburgh, and within eight days from the dest of the deliverance, in the Edinburgh, and within eight days from the dest of the deliverance, in the Edinburgh, and within eight days from the dest of the deliverance, in the Edinburgh, and within eight days from the dest of the deliverance, in the Edinburgh, and within eight days from the dest of the deliverance, in the Edinburgh, and within eight days from the dest of the deliverance, in the Edinburgh, and within eight days from the dest of the deliverance, in the Edinburgh, and within eight days from the dest of the deliverance, in the Edinburgh, and within eight days from the dest of the deliverance, in the Edinburgh, and within eight days from the dest of the deliverance, in the ereditors are required to the creditors in number and value may the entitle

bound, and no security, he must depone to that effect. A corporation may make affidavit by its acting officer. A creditor abroad may make affidavit, subject to certain regulations, in the country where he resides, or his agent may make an oath of creduity. The agent for a creditor under age may make such oath of creduity. A creditor having once qualified is entitled to vote, however unsound his claim may be. The creditor must produce, with his oath, such accounts and vouchers as may be necessary to prove his debt. If he have not the vouchers, on stating on his oath the reasons why he is not possessed of them, and whose hands he believes them to be in, a dividend will be set apart till he establish his claim. If a creditor, who has petitioned, concurred, or opposed, withdraw, or become bankrupt, or die, another may be sisted in his place, and may follow out proceedings. A mandatory of a creditor, exhibiting a written mandate, may vote in his stead. Interest, up to the date of the sequestration, may be accumulated on claims, but not farther interest. If there is a discount by the usage of trade, or if the term of payment be not arrived, a corresponding deduction must be made of discount or interest. If a creditor hold a security, he must deduct it from his valuation; he can vote only on the balance, except in questions as to the disposal or management of the estate subject to the security, on which he can vote to the whole amount. Where a creditor has an obligant bound with, but liable in relief to the bankrupt, or any security from which the bankrupt, or any security from which the bankrupt, or any security from which the bankrupt, are any security from which the bankrupt, as a right of relief, he must pat a specified value on the obligation, in his oath, and bankrupt, or any security from which the bankrupt has a right of relief, he must put a specified value on the obligation, in his cath, and

value that may be put on it by the trustee or the sheriff.

Mestings, Election of Trustee, Factor, and Commissioner.—The trustee or any commissioner may at any time call a meeting, and the trustee bound to call a meeting whenever he is required by one-fourth in value of the creditors ranked. Meetings appointed by the act are held on notices of the day, hour, place, and purpose, advertised 14 days before in the Edinburgh Gazette (except in case of the meeting for electing an interim-factor), and any meeting may be adjourned to the following day. No notification is to be sent to creditors who direct none to be sent, or to creditors for less than £50, unleas they give directions in writing to send them notice. Unless where there is an express provision otherwise, questions at meetings of creditors are settled by the majority in value of those present; "and where, for the purpose of voting, the creditors are required to be counted in number, no creditor whose debt is under £50 shall be computed in value "§ 44). Meetings may be adjourned, if not carried beyond the times fixed by the act.

At the meeting for the election of interimfactor, if two or more creditors give notice, the sheriff cierk must attend, to mark the caths and productions with his initials, and preside. The sheriff-cierk must attend, to mark the caths and productions with his initials, and write the minutes. If no sheriff is present, the creditors elect a preses, and if no sheriff-cierk be present, a clerk, both proceeding as above. In either case, those who have been entered in the minutes as qualified, proceed to elect an interim-factor or trustee, as the case may be. No person related to, or in business with the bankrupt, or holding an interest adverse to that of the creditors, is eligible as trustee. If the sheriff be present, and there be no competition, and no objections stated, he declares the person chosen to be interim-factor or trustee is to find security. The sheriff declaring the result, or deciding on objections. The creditors of the co

nomination otherwise fail, his duties devolve on the sheriff-cierk. They are as follows: He must immediately take the steps necessary for the preservation of the estate until the meeting for election of trustee. He must "take possession of and recover the bankrupt's estate, and his title-deeds, books, bills, vouchers, and all other documents whatsoever, so far as then known, and make an inventory thereof "(§ 51), a copy of which he must transmit to the bill-chamber. He must lodge all monies in bank in the same manner as the trustee, and pay the expenses of the petitioning or concurring creditor out of the first funds realized. He must keep a sederunt-book. At the meeting to elect a trustee he must exhibit the sederunt-book, "and also an account of his intromissions and disbursements, and if required by any creditor, the books of the bankrupt, with the title-deeds, bills, vouchers, and other documents, conform to inventory;" and if the meeting be astisfied, they are to fix his remuneration, to be paid with his advances out of the funds in his hands. If he be dissatisfied with the sums allowed, the amount is to be determined by the absertiff. the sums allowed, the amount is to be determined by the sheriff.

by the sheriff.

Commissioners.—A majority form a quorum.

The commissioners shall superintend the proceedings of the trustee, concur with him in submissions and transactions, give their advice and assistance relative to the management of the estate, examine the acts and intromissions of the trustee, audit his accounts, decide as to paying or postponing payment of a dividend, fix his remuneration, and may assemble at any time to ascertain the situation of the bankrupt estate; and any one of them may make such report as he may think proper to a general meeting of the creditors. (§ 67).

Trustee.—" The trustee shall manage, ralise, and recover the estate belonging to the

he may think proper to a general meeting of the creditors" (\$\frac{1}{2}\).

Trucke (\$\frac{1}{2}\). The trustee shall manage, realize, and recover the estate belonging to the bankrupt, wherever situated, and convert the same into money, according to the directions given by the creditors at any meeting, and if no such directions are given, he shall do so with the advice of the commissioners; and he, as well as the interim-factor or sheriff-clerk acting as factor, shall lodge all money which he may receive in such bank as four-fifths of the creditors in number and value at any general meeting shall appoint" (\$\frac{6}{6}1); and falling such appointment, in one of the chartered banks. The bank must annually balance the account, and accumulate the interest with the principal sum, being liable to account as if the money had been so accumulated. If the interim-factor, or trustee, keep in his hands more than \$\frac{2}{6}0\$ for more than 10 days, he must pay at the rate of \$20\$ per cent. per annum on the access, for such time as it may be in his hands beyond the 10 days; and unless the money has been kept from innocent causes, he will be diamissed, on petition to the lord ordinary. The trustee must keep a sederunt-book, entering minutes of creditors and of the commissioners, states of accounts, reports, and other proceedings. He must send an account to the bill-chamber before each dividend. Where a document is confidential, the trustee is not bound to insert it in the sederunt-book, or exhibit it to any one except the commissioners. Within 8 days after confirmation, the trustee applies to the sheriff to name a day for the bankrupt's public examination. On the warrant being granted, the trustee intimates in the Edinburgh Gazette his own election, and the time and place of the examination. On the must himmate a day and hour for a meeting of the creditors, which must be not less than 14, nor more than 3i days after the day of examination, or (in the case of a deceased debtor) after the trustee's confirmation. Within 14

tion of the estate, and an estimate of what it may produce, to be presented to the meeting, where he must be prepared to give all explanations. A majority in number and value at any meeting called through the Edinburgh Gasette, at least 1d days previously, by advertisement, specifying the purpose of the meeting, may remove the trustee or accept of his resignation. One-fourth of the creditors in value may apply to the lord ordinary for removal, showing cause. There are provisions to meet the resignation, death, or absence of the trustee. On the expiration of the trustee must make up a state of the whole estate, of the funds recovered, and of the funds outstanding (stating why they have not been recovered), and of his intromissions, and generally of his management." The commissioners, at their meeting within 14 days after the expiration of the six months, examine the state, and suld the trustee's accounts, and declare whether any and what dividend is to be made. Before a composition is approved of, the trustee's accounts must be saudited by the commissioners, and the balance due to him fixed, and paid or provided for. There are provisions for the registration of sequestrations; and to these the trustee must attend. After a final division, the trustee calls a meeting on 11 days notice, by advertisement and letters, to consider his application for discharge. On his producing his vouchers, the creditors may declare their opinion of his conduct, and he may apply to the lord ordinary or the sheriff for encoration and discharge. Before his discharge he must transmit the sederent-book to the bill-chamber clerks, who will intimate to him the bank in which unclaimed dividends are to be loiged.

The Bankrupt's Liberation, Protection, and Discharge.—The lord ordinary may, on the bankrupt's application, grant warrant of liberation, or at any meeting called for the purpose, a majority in number and value may authorize the trustee to apply to the heart ff for a renewal of the personal protection.

Allocance.—Four-fifths in val

of the personal protection.

Allowance.—Four-fifths in value of the creditors at such a meeting, may vote an allowance to the bankrupt, until the payment of the second dividend. It is not to exceed £3, 3e. per week.

State of Affairs.—The bankrupt must, before the time for the election of trustee, make up, subscribe, and deliver to the interim-factor, a state of his affairs, "specifying his whole estate, wherever situated, the estates in expectancy, or to which he may have an eventual right, the names and designations of his creditors and elebtors, and the debt due by and to him, and a rental of his heritable subjects" (§ 52). He must give every information and assistance necessary to enable the factor or trustee to execute his duty; and if he fail to do so, or to grant any requisite deed, application may be made to the sheriff to compel him. There are provisions for bringing the bankrupt up for examination, or where necessary for taking the examination, or where he finds it necessary, to procure the judicial examination of the bankrupt's wife and family, clerks, servants, and isw-agent. They must answer all lawful questions relating to the affairs of the bankrupt; and there are provisions for compelling them to answer, and for enforcing production of books and vouchers. A latent partner, who does not reveal himself by the time of the examination, forfeits the privileges of the act, unless he prove that the concealleges of the act, unless he prove that the concealment was occasioned by innocent mistake. There is an oath (or affirmation, as the case may be) which the bankrupt must take and subscribe in reference to the state of his affairs. In case of fraud, the trustee may be authorized to prosecute the bankrupt. cute the bankrupt.

Composition by Bankrupt.—See Composition

CONTRACT.

Comporition by Bankrupt.—See Composition Contract.

Discharge.—If every qualified creditor concur, the bankrupt may petition the lord ordinary or sheriff for a discharge at any time after the meeting following his examination. He may petition eight months after the date of the sequestration, if a majority in number and four-fifths in value concur. Twenty-one days are allowed for opponents to appear. When found entitled to his discharge, the bankrupt must make a declaration, or if required an oath, that he has made a fall and fair surrender, and has not granted or promised any preference or security, or made or promised any payment, or entered into any secret or collusive agreement or transaction, to obtain the concurrence of any creditor to his discharge. The discharge, when granted, operates in any part of the British dominions as an acquittance to the bankrupt. An entry of it is made in the register of sequestrations. If the bankrupt be concurred in, or cognizant of any collusive preference to a creditor, he forfeits his title to a discharge; and the discharge, if it have been granted either on or without an offer of composition, may be annulled on a petition by the trustee, or any creditor, to the lord ordinary. If the bankrupt do not notify to the trustee any property that may fall to him before his discharge, he forfeits all the benefits of the act. Any surplus after payment of the debts, interest, and expenses of procedure, is payable to the bankrupt or his representatives.

The Estate.—By the confirmation the moveable and real property is held to vest in the rustee in the rest in the rustee in the rest in the rustee in the dest in the rustee in the rest in the rustee in the dest in the rustee in the rest in the rustee in the dest in the rustee in the rest in the senting and the dest in the rustee in the rest in the rustee in

centrice. Bayane to the banaruh or in representatives.

The Extate.—By the confirmation the moveable and real property is held to vest in the trustee from the date of the first deliverance, subject to preferable securities. Where by the law of the place a conveyance requires registration, the confirmation must be registered. No lurchase of such property out of Scotland for a valuable consideration, prior to the registration, and in the purchaser's ignorance of the sequestration, is invalidated. Property falling to the bankrupt before his discharge, vests as at the date of its acquisition. All preferences and deeds granted by the bankrupt during the sequestration, without consent of the interim-factor or trustee, are vold. Bona fide purchasers, however, are secured, and so are debtors paying their debts to the bankrupt in ignorance of the sequestration. Heritable rights on which infestment may follow are, in questions under theact, to be held of the date of the registration of the sating and sales, assignations, and other conveyances which do not require infestment, but require delivery or intimation to complete them, are held to be of the date of the act so required to complete hem. A person claiming any right or subject improperly included in the sequestration, may recover it on petition to the lord ordinary. There are provisions for making the sequestration equivalent to the usual diligences for attaching property, and for equalizing preferences, in the case of a deceased deltor, when they have not been complete deltor, when they have not been complete deltor, when they have not been complete deltor, when they have not been complete deltor, when they have not been complete deltor, when they have not been completed 60 days before his death. The bankrupt, if required, must grant any deed necessary for recoverition property, and for equalizing preferences, in the case of a deceased deltor, when they have not been completed 60 days before his death. The bankrupt, if pleted 69 days before his death. The bankrupt, if required, must grant any deed necessary for re-covering his estate, and feudally vesting it in the trustee. A trustee may complete feudal titles in his own person, and superiors must enter him. The trustee may validly grant conveyances. There are provisions for compelling a transference to the trustee, where an heir has served to the de-ceased bankrupt's property. The trustee and commissioners, within two months after a creditor has voted on an eath, in which he has deducted

a security, as also the majority of the creditors (the creditor with the security not being counted) at the meeting where such creditor has voted, may require him to assign his security to the trustee, on payment of the value he has set on it, with 20 per cent. additional. The creditor may correct his value at any time before he is called on so to assign.

Disposal of the Property, and Questions with Creditors having a Right to Self.—At the meeting after the examination, or at a meeting called for the purpose, the creditors may give directions for the recovery, management, and disposal of the estate. Where there is heritable property, they may determine whether it is to be disposed of by voluntary public sale, or to be brought to judicial sale. If the creditor having a power to sell has commenced proceedings, or while he is unduly delaying a sale of heritable property, the trustee grants a title, subject to real securities. No expenses connected with the sequestration or sale are payable out of such part of the price as may be necessary to discharge the preferable securities; and no preferable heritable creditor is liable for any such expense unless he is liable for the expense of the sale. A credifor may purchase any estate sold under the act, but the interim-factor, trustee, and commissioners, may not purchase.

purchase any estate sold under the act, but the interim-factor, trustee, and commissioners, may not purchase.

*Declaration of Dividend and Ranking.—

The commissioners at their meeting within 14 days after expiry of six months from the date of the sequestration, declare what amount may be distributed in dividends; and within the same 14 days, if a dividend is to be made, the trustee must examine the oaths and grounds of debt, and in writing reject or admit them, or require farther evidence, stating the reasons where he rejects. He then makes up two lists; one, of the oreditors he ranks as entitled to draw dividends, specifying their debts, with interest to the date of the sequestration, and distinguishing the ordinary from the preferable creditors. The other list is of the dreditors whose claims he has partially or wholly rejected. Notice is sent to rejected creditors, who may appeal to the lord ordinary or sheriff. A creditor who holds a security, before being ranked, must put a value upon it, deduct it, and specify the balance, on which alone he can rank. The trustee is entitled either to demand an assignation to the security on paying the value put upon it, or to let the creditor take the benefit of it. In the case of the claim on a partner for a company debt, the dividend from the commany must be deducted. An annuity creditake the benefit of it. In the case of the claim on a partner for a company debt, the dividend from the company must be deducted. An anaulty creditor ranks for the value put on his annuity, and if there be a cautioner for the annuity he is discharged, on payment of the estimated value and arrears. Co-obligants with the bankrupt are not discharged by the creditor consenting to the steps of the sequestration; but if the co-obligant pay the debt, the creditor must assign it to him, and he may rank for it.

Payment of Dividends.— Where there are sufficient funds realized, the dividends are resufficient funds realized, the dividends are respectively payable on the first lawful day after the expiration of the following periods, viz. the first, of 8 months from the date of the sequestration; the second, of 19 months from the same

first, of 8 months from the date of the sequestra-tion; the second, of 19 months from the same date; and future dividends after the expiration of 4 months from the date of the payment of the immediately preceding dividend, until the whole funds be distributed. To entitle a creditor to payment of the first, or of the second, or of any other dividend, he must produce his oath, dr.e., at least 2 months before the time of payment. A creditor who has not been in time for the first dividend is entitled to a preference on the subse-

quent dividends. After the expiry of the 14 days, within which (on the expiry of the six months from the date of the sequestration) the trustee has to make up his state and rank the creditors, he must advertise in the Ediaburgh Gassette the time and piace for payment; and on or before the first lawful day after the 14 days, he must notify the same to each creditor by post, with the amount of the claim and dividend. Before the expiration of elight months from the sequestration, the trustee has to make up a scheme of division among those creditors whose claims have been sustained, or who have appealed. The scheme must be patent to all concerned. The like proceedings take place at intervals of four months till the trust is wound up. Dividends reserved on account of an unaccomplished contingency, or appeal, are to be lodged in bank. The commissioners may postpone a dividend till the period for making the next one, directing the trustee to give notice in the Edinburgh Gasette.

Winding up and Miccollancous.—After 12 months from the accommendation.

Winding up and Miscellancous.—After 12 months from the commencement, if it seem expedient to sell the remaining property, and

outstanding claims, a day may be fixed for a meeting for the purpose, to be called by advertisement and special notice. On three-fourths in value of the creditors assembled consenting, the sale may take place by anotice. Unclaimed dividends being deposited in bank at the direction of the clerks of the bills, a register is kept of them. The parties entitled, on applying to the lord ordinary, obtain payment of such unclaimed dividends, but without interest, which is accumulated in a separate fund, at the disposal of parliament. There are provisions for punishing all frauds and collusive preferences, and for nullifying the advantage sought to be obtained by them. The resolutions of meetings, and proceedings of the trustes, may be appealed against to the lord ordinary or the sheriff,—the former within 14, the latter within 20 days. Persons, by merely claiming and voting, are not liable to the agent's expense. He has his recourse merely against the estate, or the interimeter or trustee who may have employed him. [APPIDAVIP. BANKRUPTOV. COMPOSITION CONTRACT.]

SEQUIN, an Italian gold coin = 9s. 5d.; also a Turkish money.

SERGE, a quilted woollen cloth, made in Devonshire and other parts of England.

SERPENTINE, a mineral, one species of which, called noble serpentine, green and translucent, is valued as an ornamental stone.

and translucent, is valued as an ornamental stone.

SERON, a kind of package, formed of pieces of wood fastened with hides.

SHAD (Alosa finia, Cuv.), a fish allied to the herring, found in the Severa and in the Thames, where it is in season in July; its flesh is unpalatably dry.

SHADDOCKS, a large species of Citrus (C. decumana), commonly cultivated in both the East and West Indies for the sake of the delicate subacid juicy pulp in which they abound. When at their greatest size they are called Pompoleons; the smallest form the Forbidden Fruit of the English markets.

SHAGREEN (Fr. Chagrin. Ger. Schagrin. Rus. Schagrim), a sort of hard grained leather, prepared in a negaliar manner from the skin of horses and other

SHAGREEN (Fr. Chagrin. Ger. Schagrin. Rus. Schagrim), a sort of hard grained leather, prepared in a peculiar manner from the skin of horses and other animals; the part preferred being the piece above the tail. It is made in Poland; Russia, especially at Astracan; and in various parts of the Levant. The best is said to be imported from Constantinople. It is employed in the manufacture of small cases and boxes.

small cases and boxes.

SHALLOONS, loosely made woollen stuffs, commonly used for lining coats.

SHAMMY on CHAMOIS LEATHER, is properly the dressed skin of the chamois goat; but common goat, kid, or sheep skin is generally substituted for it.

SHARKS' FINS are exported in large quantities from India to China, where they are esteemed a very strengthening food. They are chiefly collected in the Arabian and Persian Gulfs; but they are likewise prepared on the coasts of India. They should be chosen large and properly cured. Those under nine inches long reckon only as one-half the value of the others.

SHAWLS (Fr. Chals, Chales. Ger. Schalen. It. Shavali. Por. Chales. Sp. Schaudler). well-known articles of dress. made of silk, wool, or more commonly of

reckon only as one-half the value of the others.

SHAWLS (Fr. Chals, Chales. Ger. Schalen. It. Shevali. Por. Chales. Sp. Schavalos), well-known articles of dress, made of silk, wool, or more commonly of silk and wool mixed. The chief seats of the shawl manufacture in this country are Paisley and Norwich. The competition of the French, after the opening of the silk-trade in 1826, produced improvements in style and pattern, which led to a signal extension of the British manufacture. And though our native patterns are scarcely yet equal to the French as respects the contrast of colours, they are yearly improving, owing to the increased attention now bestowed on the arts of design. But both British and French shawls are inferior to those made in the Valley of Cashmere, from the wool of a species of goat found on the cold mountains of Thibet; the exquisite fabric of which cannot be successfully imitated by foreigners. The European manufacturer may impart much of the beauty and copy with success the pattern; but his web possesses none of the delicacy, softness, and warmth of the original. Nor are the weavers of the adjoining countries more successful; the shawls of Lahore and Delhi, though woven by natives of the valley, and with the same materials, are wanting in the fineness of those prepared in Cashmere. If implicit reliance is to be placed in the people, the shawl derives much of its beauty from the water in which the wool is dyed, and which is peculiar to their country. Notwithstanding the reputation of these shawls, however, the number of looms employed in their manufacture has greatly fallen off in modern times. According

to a statement copied by Mr Martin, in his work on the British Colonies, from the Delhi Gazette, the number at present is estimated at 6000, and the average value of shawls annually exported from Cashmere about £180,000. The Cashmere shawls are generally sold in pairs: they usually consist of three sizes, two of which, the long and the small square, are those commonly brought to this country; the other, long, very narrow, and chiefly of a black colour, is worn by many Asiatics as a girdle. The shawls for the British market are mostly selected with coloured grounds, and handsome rich borders and flowers. They are imported chiefly from Bombay and Surat.

At present, owing to the caprice of fashion, shawls are much less worn in this

At present, owing to the caprice of fashion, shawls are much less worn in this country than formerly; and great distress has in consequence been produced in Paisley and other places dependent on their manufacture; but this depression is

Paisley and other places dependent on their manufacture; but this depression is we hope but temporary.

SHEEP (Fr. Brebis, Mouton. Ger. Schafe), a ruminating animal, chiefly distinguished for its fur or hair, which is of two kinds,—one hard and close, and the other woolly; the latter preponderating in proportion as the animal is domesticated. In Europe and other parts of the world the sheep is carefully tended for its wool, which is the chief material of the clothing of all northern nations. But every part is fitted for use. The flesh, heart, liver, kidneys, and spleen, as food; the intestines are made into strings for musical instruments; the skin into leather and parchment; the bones into handles, spoons, and toys; the internal and loose fat makes tallow; their milk may be made into cheese; and their dung is a rich manure. The sheen, besides, can be reared in situations unfitted for any other quadruped.

tallow; their milk may be made into cheese; and their dung is a rich manure. The sheep, besides, can be reared in aituations unfitted for any other quadruped. The sheep belongs, according to Cuvier, to the tribe Caprida, and genus Ovis. After 5 months gestation the lamb is dropped, usually in this country in March or April; and May and June are the sheep-shearing months, as the animal sheds the superfluous wool on the approach of warm weather. It lives naturally for about 15 years; but from 13 to 2 years is the common period at which it is fattened for food; and even breeding stock are not usually kept beyond five or six years. Age is reckoned not from birth but from the first shearing. The male is called a ram or tup: after weaning he is said to be a hog or hogget, a lamb-hog, or tup-hog; and if castrated, a wether-hog. After shearing, when fully one year old, he is a shear-hog or shearling, a dinmont, a tup, or shearing-wether; and after the second shearing a two-shear ram or tup. The female is a eve or gimmer lamb until weaned; then a gimmer or ewe hog; after being shorn a shearing ewe or gimmer; after that a two-shear eve; and so on.

after that a two-shear eves; and so on.

England has from a remote period been celebrated for her sheep,—on the numerous breeds of which many improvements have of late been effected, chiefly with the view of increasing the profitable return from the carcass; as the wool has become generally longer, heavier, and coarser than formerly. Their numbers have likewise been increased by means of the artificial or turnip husbandry. British sheep are usually classed into short-woolled and long-woolled; the leading and most improved breed of the former being the South-Down, chiefly occupying the hills of Sussex; and of the latter, the new Leicester. The South-Down is well adapted for the chalky hills of the south, where this breed is chiefly diffused. Its fleece, short and fine, weighs from 3 to 4 lbs.; and its mutton, fine in flavour and grain, weighs, in two-year old wethers, about 18 lbs. a-quarter. The Leicester is not adapted for poor soils, nor for travelling to seek its food: its fleece averages from 6 to 7 lbs.; and its mutton, fat, fine in grain, and of superior flavour, weighs, in two-year old wethers, from 20 to 30 lbs. the quarter: on fair keep the Leicester will yield a greater quantity of meat for the same food than any other breed. Of other breeds, the chief short-wools are the black-faced Soots, the Cheviots (now generally reared instead of the former in Scotland), the Dorset, the Hereford, the Wiltshire; and the chief long-wools, the Tecswater, the Lincoln, and the Romney-Marsh. But it would be difficult to select any district into which the South-Downs and Leicesters have not penetrated and materially improved the native breeds. England has from a remote period been celebrated for her sheep,have not penetrated and materially improved the native breeds

In many foreign countries the carcass of the sheep is disliked, or at least rarely eaten; and the animal is tended almost solely for its fleece. In Spain, except by the poorest, mutton is considered unfit for food; the wool, however, is of superior quality, particularly that of the *Morino* breed, which of late years has been suc-

cessfully introduced into Germany, Australia, and elsewhere.

The commerce of sheep in Britain chiefly consists in fattening them up in the pastoral districts, and afterwards removing them to the towns for food. Immense quantities are carried from Ireland to Liverpool, and from the Midland Counties. Wales, Scotland, and other places to the metropolis. The number of sheep and

lambe sold annually at Smithfield is about 1,400,000, which is exclusive of large quantities of caroasses brought to London by steamers, railways, and otherwise. The fleeces are mostly purchased from the farmers by staplers or dealers at annual wool fairs. The number of sheep in this country is variously reckoned. Mr Luccock estimated the number in England and Wales in 1800 at 19,007,607, of which the greater mated the number in England and Wales in 1800 at 19,007,607, of which the greater part (14,854,229) were short-wooled; and, according to Mr Hubbard, the number of sheep had increased one-fifth between 1800 and 1828. The number at present, therefore, may be safely taken at 25,500,000, now chiefly long-wooled; to which adding one-third for Scotland and Ireland, makes the total of the United Kingdom, 34,000,000. Mr M'Queen, hewever, in his "Statistics of the British Empire" (p. 20), estimates the number of permanent stock at 48,000,000; their value at £60,000,000; and the quantity of wool annually produced at 246,700,000 lbs.! SHEKEL, an ancient Jewish weight and coin, estimated, the former at § 02. avoirdupois, the latter at 28.7d. There were, however, several standards of the shekel, and various opinions are entertained respecting their values.

avoirdupois, the latter at 2s. 7d. There were, however, several standards of the shekel, and various opinions are entertained respecting their values. SHELLAC. [Lac.]
SHERBET, a favourite beverage in the East, made of water, lemon-juice, and sugar, with the addition of rose-water, or some other fragrant ingredient. SHINGLES, a term applied in the lumber-trade of N. America and the W. Indies to thin boards, which are used in these countries for the same purpose as slates and tiles in Britain. They are from 18 to 30 inches long, 4 to 6 inches broad, and at one end §ths of an inch thick, while at the other they are reduced to less than §th of an inch. The roofs of buildings are shingled much in the same form as roofs are slated in Britain, and, when painted to correspond in colour, have very much the same appearance. much the same appearance.

SHIP, a term applied generally to all decked vessels used in navigation; but by seamen only to those which have a fore, a main, and a mizzen-mast, with a top-mast and top-gallant mast to each, and in which the yards, in sailing before the wind, are braced square, the mizzen sail alone being usually in a fore and aft position. wind, are braced square, the mizzen sail alone being usually in a fore and aft position. A barque has maste and sails like those of a ship, except that the mizzen-mast carries no top-sail or top-gallant sail. Each has a bowsprit, which carries a fore-stay-sail and a jib-sail. To other kinds different designations are given according to the number of their maste, the disposition of their sails, or their moving power,—as brig, snow, schooner, galliot, sloop, steamer, smack, and cutter, as explained under these heads. Ships are generally built of wood, but they are now sometimes made of iron. In the construction of a vessel the most essential conditions are—that it be capable of carrying its lading; that it be moved with great velocity, and readily obey the rudder; that it have the necessary stability, so as not to be overturned; and that its rolling or pitching be attended with as little strain as possible on the timbers. But the degree of attainment for each of these qualities—which in some respects are contrary to each other-will depend on the purpose, whether of war or commerce, for which the ship is built. In merchant-ships capacity is frequently of more importance than velocity; and in this case the relations between the length, breadth, and depth depend less upon hydrodynamical principles than in men-of-war. Upon these and other points relations hydrodynamical principles than in men-of-war. Upon these and other points relating to naval architecture, however, we must refer to the works cited below.

GLOSSARY OF NAUTICAL TERMS. Aback, the position of the salls when blown flat against the mast.

Abaft or Aft, towards the hinder part.

A-beam, perpendicular to the ship's length.

Aboard, within the ship; also said of one when foul of another.

Adrift, not fastened.

Adrift, not fastened.

Agagin to visid on to be see foul of another.

Adrift, not fastened.

Amain, to yield, or to let go.

Amidshipe, the middle of the ship.

Athwart or Theart, across.

Back-Slays, ropes from the top-mast heads to the ship-sides in aid of the shrouds.

Beams, the timber supports stretching across the ship; whence beam expresses the width of a vessel; and a ship lying on her side is said to be on her beam-ends.

Bends or Wales, the ship's side planks, from the Bends or Wales, the ship's side planks, from the vater upwards. water upwared a rope between the ends; also a shallow hollow in a line of coast. Bi'ge, the flat part of a ship's bottom. Bi'ged, having the bottom stove in.

Bower anchors, those at the bows Bose, the two fore extremities of a ship.

Boseprit, a sloping mast at the bows.

Box hauling, bringing a ship when close-hauled round upon the other tack when she cannot tack or wear. Boxing of, backing the head-sails to force the ship's head rapidly off the wind. Boxing the compass, repeating the points in

order.

Brace, a rope at the extremity of the yard to traverse the sails when necessary.

Braming, cleaning the ship's bottom by fire.

Bulkhead, any partition in a ship.

Bumboal, the boat of a provision dealer, &c.

Burden, the tonnage of a ship.

Cuble, the rope or chain holding the anchor.

Cunt, to turn over; also the support of a bulkhead. Capsium, a cylinder on which a rope is coiled by means of lever bars. Careening, turning a ship to repair her bottom.
Cat-head, the bow timler to which the bower
anchor is fastened. Caulk, to stuff the ship's seems with oakum.
Channels, outside platforms extending the shrouds. shrouds.

Closs-houled, tacks close down, sheets aft, yards braced sharp up, and bowlines hauled; the ship progressing as near the direction of the wind as possible.

Composion, the covering over a ship's staircase.

Courses, the lower square-salls.

Crask, when by ill construction, ballasting, or loading, a ship cannot carry sail without danger of oversetting.

Cringles, loops.

Davis, a spar used in managing the anchor.

Dead -type, a kind of blocks fastening the shrouds to the chains.

Pead-lights, the cabin window-shutters. Dead-lights, the cabin window-shutters.

Dead-water, that which closes behind the stern.

Derrick, a tackle used at the outer quarters of Derrick, a tackle used at the outer quarters of a mizzen yard, &c.

Draught, the water depth of the ship.

Drift, the angle of a ship's motion with the meridian when driven by wind and waves, and not governed by the beim.

Dunnage, lose material used in stowage.

Easy, asiling without jerking or straining.

Fend of, pushing off to avoid contact.

Fituke, the part of the anchor which holds.

Fore and Aft, in the direction of the ship.

Forecastle, the upper deck near the head.

Forepool, the fore extremity of the keel.

Forepool, the place allotted to the crew in merchant ships.

Fother a sail, pasting it under a leak.

Foul, a contrary wind; also uneven ground. Folia: a sout, pussing it unever near. Folia; a contrary wind; also uneven ground. First, rolling up a sail to the yard. Futtocks, the timbers between those of the floor and the top.

Galf, the upper yard of fore and aft sails.

Galley, the kitchen of a ship. vaucy, the Eitchen of a ship.

Gargouy a narrow passage

Garket, the cord by which furied salis are bound.

Grapnel, a small anchor for a boat.

Gripe, the fore part of a ship.

Gunsaulz, the upper part of the ship's side below

the bulwark. the busicaria. Halliards, ropes for hoisting yards, sails, &c. Handspike, the lever of the capstan or windlas Hants, rings upon which sails traverse, &c. Handspike, the lever of the capetan or windlass. Hanks, rings upon which sails traverse, &c. Hatch, the covering of a hatchway. Hatchway, the opening of the ship's hold. Hassl, pulling upon a rope directly. Haut the wind, bringing the ship to sail close by the wind.

Hauser, the part of the bows close to the cable. Hasser, a large rope, or small cable. Head, the fore extremity of a ship. Hause, to employ force to move weights, &c. Heel, the after extremity of the keel. Helm, the mechanism of the steerage. Helm a-tearboard, is to move the tiller to the right; a-port, to the left; up, to the weather side; doesn, to the lees side.

Hote, a fing when close in its place.

Howe, a thing when close in its place.

Hote, an old ship unfit for service.

Hull, the main body of the ship.

Jack, a flag used in making signals.

Jamb, to squeeze tight; the opposite is to render.

Jeers, strong tackle for raising, or swaying up, Jeers, strong tackle for raising, or securing up, the lower yards.

Jib, the sail between the fore-top-mast and bowsprit end.

Red, the timber first laid in shipbuilding; the false keel is that added for defence, and making the ship hold better.

Reison, a timber laid withinside across all the timbers over the keel, and forming its interior counterpart.

Knee, a bent timber for receiving another.

Land-locked, water apparently surrounded by land.

Lanpard, certain fixed or temporary lashings.

Lanboard, the left side looking forward.

Laten sail, a triangular sail, with a long inclined yards, the largest boat of a man-of-war.

see, Leeward, the side not directly exposed to
the wind.

secker, the sides of the sails; but the weather

or side adm of any but a series and it is alled or side edge of any but a square sail is called the luff, and the other edge the after leach. second, the deviation of the actual course from that steered. that steered. Life line, a safety rope hung out. Life line, a safety rope hung out. Life, the ropes supporting yard-ends. Lug-sait, a four-sided sail bent to a yard slung about one-fourth from the lower end. Lying to, the state of a ship when the sails are so disposed as to counteract each other. Mariinespike, a spike for opening strands of Martingale, the rope leading down from the jib-boom end.

Mast, the upright series of timbers supporting
the sail-yards; of which in large ships there
are three—the main-mast, fore-mast, and
iop-gallant masts, and sometimes a royal. Messenger, the hawser wound round the capstan.
Midships, the ship's middle as to length or
breadth. Nippers, ropes attaching the messenger to the cable. cable.

Northing, the difference of latitude made in Offing, a deep part of the sea at a distance from the shore. the shore.

Ortop-deck, in a man of war, is the lowest, on which cables, &c., are stowed; the fore and after parts are called cockpits.

Painter, the rope fastening a boat, &c.

Poop, a high partial deck close at.

Port, the opening for a gun.

Quarter, the after part of a ship's side.

Quarterdeck, the portion of the uppermost deck between the main and miszen masts.

Rake to. is to incline. To rake a ship, is to fire deck between the main and mixem masts. Rake to, is to incline. To rake a ship, is to fire into her in the direction of her length. Ref, to lessen the mils; also a chain of rocks near the surface of the sea. near the surface of the sea.

Reeve, putting a rope through a hole.

Rig, the peculiar manner of rigging.

Rolling, the lateral oscillation of a vessel.

Royal, the sail above the top-gallant-sail.

Rudder, the flat piece of wood hung on the sternpost for the purpose of steering.

Sagging to leeward, making considerable leeway.

Sails, the sheets by the action of the wind on which the vessel is moved. They are variously designated, but generally from the mast, yard, or stay upon which they are stretched. The upper two corners are earings, the lower Scupper, a hole in the deck or side to carry off water. Water.
Scuttle, an opening in the ship's side or deck.
Sea, a single wave; also general agitation.
Scams, the spaces between the edges of planks.

keer, the curve of the line of the deck. Reer kulk, a hulk fitted with sheers for mast-

Reer with, a numer warming in ships, dec.
Reers, two spars raised vertically for masting.
Reets, ropes for extending sails to the wind.
Reet anchor, the third of the four ship's

anchors.

Shrouds, the ropes supporting a mast laterally.

Shry-stil, a small sail set above the royal.

Slope, clothes and bedding supplied to the seamen at their expense.

Spanker, the gaff sail on the missen-mast.

Spanker, the gaff sail on the missen-mast.

Slarboard, the right side looking forward.

Slay, a rope leading forward in support of the mast. In stays, the act of tacking. To miss stays, to fail in attempting to tack.

Studding-stile, narrow sails set at the outer edge of the square sails.

tudding-easis, parrow salls set at the outer edge of the square sails. scab, a bundle of old yarns swung to dry the

decks.
Tisck, the weather clue of a course, .dc. The starboard lack is when a ship, close hauled, has the wind on the starboard side; the larboard tack is when the wind is on the larboard side. To tack is to change from one to the other by turning the ship with her head to the

wind.
Tuckle, a pulley composed of several blocks.
Tujficil, the uppermost call of the stern.
Tunk, a square water-cistern of sheet fron.
Tunk, a square water-cistern of sheet fron.
Tunpauling, a tarred or painted canvass cover.
Tiller, the turning har of the rudder.
Timbers, the upright pieces of a ship's frame.
Topp, a platform near the lower mast head.
Topping lift, a rope for raising a yard end.

SHIPPING. The most important branches of the Law of Shipping will be found discussed under various sub-heads as follows:

The arrangements it is necessary to adopt and adhere to, in terms of the Navigation Laws, for securing the privileges of a British vessel—under the head Naviga-

The registering of vessels, and the collateral operations in regard to the property and transfer of shares, dictated by the Registry Act—under the head Registry The regulations for the enforcement of the Revenue Laws—under the heads

CUSTOMS and SMUGGLING.

The arrangements appointed by statute for adjusting the mutual rights of the mariners and their employers—under the head SEAMEN.

The rights and obligations of the shipmaster—under the heads MASTER and BARRATRY.

The Law of Insurance—under the head Insurance, Marine,

The law regarding contracts connected with the employment of vessels—under

the heads BILL OF LADING, CHARTEE-PARTY, DEMURRACE, and FREIGHT.

The law regarding securities over the ship or cargo—under the heads BOTTOMRY and RESPONDENTIA.

and RESPONDENTIA.

Almost the only subject that remains for special consideration is the responsibility of shipowners for goods committed to their charge, independently of special contract. It is the duty of the owners to have their vessel, both in hull and rigging, suited for the voyage, and for the safe keeping of the species of cargo contracted for or received on board. There must be a competent master and a sufficient crew of able seamen. The ship must have on board whatever papers are necessary for her protection and that of her cargo, whether required by the laws of the country she belongs to, or by those of the port of destination, or dictated by international law. There must be no false or fraudulent papers, which may subject the ship to capture or detention. The mercantile customs of the port must be adhered to in regard to the employment of wharfingers, lightermen, &c. in lading. The owners are responsible for theft or robbery committed before breaking ground. The master previous to sailing must make the necessary clearances at the Customhouse, and pay all the usual charges. When the preliminaries are completed, the master must sail without delay when the weather is favourable, but not till then. master must sail without delay when the weather is favourable, but not till then. Where sailing with convoy is stipulated for or required by law, the sanction must be obeyed in terms of the law on that subject. [Convoy.] A pilot must be employed in those roads, rivers, and narrow seas where such a precaution is enjoined,

Traveller, a ring which slides along a rope.

Treenalle, wooden bolts securing the shin's

Tressells, wooden bolts securing the ship's planks.

Trues, a rope confining a lower yard.

Trues, a small gaff sell of storm canvam.

Feer, to give the ship more scope of cable.

Waist, in a man of war, the part of the gundeck between the fore and main masts.

Wake, the track which a ship leaves in the water.

Warp, a rope laid out for the purpose of moving a ship.

Watch, the portion of the crew on duty.

Water-logged, loss of buoyancy by leakage, &c.

Way, progress.

Water-togged, loss of buoyancy by leakage, &c. Way, progress.
Wesr, placing a vessel on the other tack by turning her round, with her stern to the wind.
Weather, the side on which the wind blows. To secondar, to pass to windward.
Weather gage, is said of a ship to windward of searching.

another.
Wheel, that by which the tiller is moved.
Whip, a rope passed through a single block.
Windscard, the side directly exposed to the wind.
Wings, passages between the fore and after cockpit.
Yard, the beam on which a sail is extended.
Yard-arm, the extremity of the yard.
Yass, temporary deviation from a direct course.
Windians, a horizontal modification of the wheel and axle, used in small ships instead of a capsetan.

a capetan.

a capstan.
[Further information will be found in Charnock's Marine Architecture, Darcy Lever's
Saamaship, Falconer's Nautical Dictionary,
Encyclopedia Britannica, and the Penny Opclopedia; also Brande's Dictionary of Science.]

either by special law or usage. But there is by statute no responsibility for the absence of a pilot, unless it be proved that it arose "from any refusal to take such pilot on board, or from the wifful neglect of the master in not heaving to and using all practicable means consistent with her safety, for the purpose of taking on board any pilot, who shall be ready and offer to take charge of the ship" (6 Geo. IV. c. 125, § 53). "The master must proceed to the place of destination without delay, and without stopping at any intermediate port, or deviating from the straight and shortest course, unless such stopping or deviation be necessary to repair the ship from the effects of accident or tempest, or to avoid enemies or pirates, by whom he has good reason to suspect that he shall be attacked, if he proceeds in the ordinary track, and whom he has good reason to hope that he may escape by delay or deviation, or unless the ship sail to the places resorted to in long voyages for a supply of water and provisions, by common and established usage" (Abbatt, 317). If the ship be captured or lost in consequence of deviation, the freighter may recover the prime cost of his goods and the shipping-charges. In cases of difficulty and of danger, the master has to keep in view that it is his primary duty to convey the cargo to its place of destination, and that it is only in an extreme case, and when there is scarcely a possibility of accomplishing this object, that he is entitled to act as agent for the freighter, and adopt the course that seems to involve the least sacrifice to his property. On arrival at the port of destination, the ship must be securely moored or anchored, and all papers delivered, and other requisites performed, in terms of the customs regulations and the laws of the place.

The pleas which, in the absence of special stipulation, will excuse the master and owners in the case of injury colors are in a secured by a control of the customs of injury colors are in carried to act.

securely moored of anchored, and all papers delivered, and other requisites performed, in terms of the customs regulations and the laws of the place.

The pleas which, in the absence of special stipulation, will excuse the master and owners in the case of injury or loss, are in general briefly described as, "The acts of God," or, "of the queen's enemies," and "perils of the sea." The first expression applies to all sudden calamities—as lightning or a hurricane. The damage must be from the direct agency of the calamity: thus, where part of a bank had been swept away by a flood, and a vessel, striking against it, would have remained safe had the bank been in its old condition, but sunk stern forwards, and damaged the goods by reason of the change, there was no exemption from liability (Smith v. Shepherd, Abbott, 338, 339). Fire produced internally does not come within the exemptions by common law; but by statute (26 Geo. III. c. 86), the owners are exempted from responsibility for such loss. The "acts of the queen's ememies" apply to capture or injury by hostile powers. The perils of the sea embrace all those usual calamities incident to navigation, which cannot be obviated by the usual care and foresight. It will very often be a nice question whether a calamity is or is not such as could have been so obviated; and this is particularly the case in damage by Collision (which see). There are statutory limitations on the responsibility of owners. By 26 Geo. III. c. 86, § 3, they are not liable for loss or damage to "any gold, silver, diamonds, watches, jewels, or precious stones, . . . by reason or means of any robbery, embezzlement, making away with, or secreting thereof," unless their nature, quality, and value have been inserted in the bill of lading, or otherwise declared in writing to the master or owners. By 55 Geo. III. c. 189, the responsibility of owners for damage arising from any act or neglect not occasioned by the fault or privity of the owners, is limited to the value of the ship, and the freight on th

Pilotage is regulated by 6 Geo. IV. c. 125. Amended under the 12 & 13 Vict. c. 88, the authorities on Pilotage are empowered to qualify masters or mates, who

have obtained certificates to conduct their own vessels.

Ships conveying Passengers to ports out of Europe and not in the Mediterranean Ses, are under the regulations of 5 & 6 Vict. c. 107, which repeals the previous act of 5 & 6 Wm. IV. c. 53. It makes special regulations for the provisioning of emigrant ships, for their tonnage according to the distance of their destination and the number of passengers, and similar matters.

The conveyance of passengers between Great Britain and Ireland is regulated by

4 Geo. IV. c. 88.

The Quarantine Regulations are embodied in 6 Geo. IV. c. 78. SHIPPING. Under COMMERCE, COLONY, and EAST INDIA COMPANY, we have given a summary of the early progress of maritime enterprise among the states of Europe. Of the British commercial navy there is no authentic account prior to last century. It is known, however, to have become considerable, compared with the shipping of other countries, during the reign of Elizabeth, and to have gradu-

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ally increased under her successors, particularly Charles II. and James II.,—the shipping cleared outwards under the national flag having, it is supposed, doubled in amount between the Restoration, 1660, and the Revolution, 1638.

In 1701, according to Castoms Returns (Mappherson's Annals of Commerce, vol. ii. p. 719), there belonged to English ports (chiefly London, Bristol, and Yarmouth) 8281 vessels, estimated to measure 261,222 tons, and carrying 27,196 men. The shipping is supposed to have been doubled between 1701 and 1761 after which its increase became quite extraordinary. In 1800 (16. vol. iv. p. 535), it amounted in England to 1,466,632 tons; Sootland, 161,511; Ireland, 54,262; Channel Isles, 16,110; and Colonies, 157,364 tons: total, 1,855,879 tons, employing 138,721 men. The importance of the commercial marine as a nursery for seamen to man the national fleet was early seen and acknowledged. And by the famous Navigation Act, 1651, a complete monopoly of the carrying trade of Britain was secured to her merchantmen. Under Navigation Laws, an account is given of the history and present state of that monopoly, which was rigorously maintained upwards of 150 years—down indeed to our own time—when the retallatory policy of the Cunited States and Prusais led to several important relaxations; the principal being the Reciprocity System of Mr Huskisson, which was introduced in the year 1823.

The introduction of the reciprocity system having been followed by a depreciation in the value of shipping property, violent attacks were made upon Mr Huskisson's policy by the shipowners,—a numerous, wealthy, and influential body,—who, acting in concert, have always been able to command a speedy attention to their representations. It is now, however, very generally admitted that the depression which then took place is fairly attributable to other causes. Ships became cheaper because they could be built cheaper, arising from a great fall in the price of their materials,—wood, iron, copper, and hemp,—while improvements too But the most triumphant vindication of Mr Huskisson's policy is to be found in the facts, that the number and tonnage of vessels built since the change have been greater than at any preceding period; the registered shipping having increased from 2,519,044 tons in 1822 to 3,512,480 tons in 1842, or about 40 per cent; and the amount of British shipping cleared outwards for foreign countries and colonies, from 1,539,260 tons in 1822, to 3,429,279 tons in 1841—an augmentation of 122 per cent. The increase of foreign shipping cleared outwards in the same 20 years transform 457,549,541,336,893 tons. was from 457,542 to 1,836,892 tons

per cent. The increase of foreign shipping cleared outwards in the same 20 years was from 457,542 to 1,336,892 tons.

Nor is the constant progress of British shipping less conspicuous when viewed in comparison with that of other countries. For example, in the trade with the United States—our chief maritime rival—a continually increasing proportion of our tonnage has of late years been employed. Between 1821 and 1836, the British shipping which entered the ports of the republic increased from 55,183 tons to 529,922 tons, or 360 per cent.; while the increase in the American shipping, employed in the foreign trade of the States, was, in the same period, not more than from 765,093 tons to 1,352,653 tons, or 77 per cent. And as regards Prussia, to which our shipowners looked with the greatest apprehension, her mercantile navy has been most strikingly diminished in amount since the commencement of our reciprocity agreement with her. It likewise appears (Porter's Progress of the Nation, § 3, ch. 10), that the proportion of foreign to national shipping, employed in the import and export trade of the United Kingdom, is smaller than in any other state of the least importance,—the proportion in 1835, 10 years after the reciprocity system came into operation, being only 28 per cent.; while in the United States it was 32 per cent.; in France, 60 per cent.; in Russia, 78 per cent.; at Dantzic, 35 per cent.; and in Sweden (in 1834), 53 per cent.

Shipbuilding in the United Kingdom is prosecuted chiefly in London, Newcastle, Sunderland, Hull, Liverpool, and the ports on the Clyde; which last are especially celebrated for their steam-vessels. It is also carried on extensively in New Brunswick and other parts of British America. The cost of new ships, including outfit, averages from about £10 to £12 per ton; though the slop-built ships of New Brunswick cost little more than £6 per ton. And it appears from a table compiled by Captain Parry, from the estimates of 30 different authorities, and introduced by him in his Report on the

Registered Shipping of the British Empire, as on 31st December 1840 and 1841; and Ships Built in the Years ended 5th January 1841 and 1842, respectively.

		Ships Registered.					Ships	Built		
		1840.			1841.		1840. 1841.		841.	
EnglandScotlandJersey, Man, &c Colonies	Venuele. 16,535 3,479 1,969 671 6,308	429,204 183,854 44,155	28,428 11,927 5,018	3,642 2,016 714	193,807	30,287 12,345	963 49 78	165,859 42,322 3,115 8,775	245 51 81	Tons. 111,830 43,318 4,430 8,731 114,505
Totals	28,962	3,311,588	201,340	30,052	3,512,480	210, 198	2219	363,352	1741	282,814

Account of the Tonnage of Shipping Registered at each of the principal Ports of the United Kingdom, including the Channel Islands, on December 31, 1841.

Sailing	Vessels.	Steam		Sailing	Vessels.	Steam
Under 50 Tons.	Above 50 Tons.	Vessels.		Under 50 Tons.	Above 50 Tens.	Veasela.
			Scotland.			
		37,257	Aberdeen			3,162
		44				450
2,940	37,557	2,788	Dumfries	4,642	6,502	306
		17				1,816
		17	Glasgow			10,298
6,244	5,732		Greenock	5,007	83,138	186
7,855	14,521	135	Inverness	3,195	5,285	18
5,261	65,179	2,758	Irvine	811	14,053	56
1,622	19,116	266	Kirkaldy	3,019	8,727	207
4,154	302,730	5,563	Leith	3,113	21,468	1,568
	17,186		Montrose		22,854	101
	259, 184	2,560			9,507	19
7,859	21,009	288	Port-Glasgow	910	12,095	347
1,188	12,155		Ireland.			
	9,425	167			44,236	1,922
	6,919	99	Cork		29,595	217
1,289	31,010		Dublin	7,153	12,337	10,815
736	53,353	427			12,515	
1,527	176,259	433	Newry		5,837	203
1,907	47.837	67	Waterford	1,950	18,310	999
1.576	68,990	337	Jersey	2,596	23,155	117
10,042	84,320	451			14,755	l l
	Under 80 Tens. 19,165 9,540 2,940 4,574 1,637 6,245 5,261 1,689 1,188 3,235 7,869 1,188 3,512 7,504 1,129 7,504 1,299 7,504 1,299 7,504 1,299 7,504 1,299 7,504 1,299 7,504	Ten. 19,165 563,295 9,540 17,306 2,940 37,587 4,574 94,171 1,637 15,637 6,344 5,732 7,885 14,591 1,682 19,116 3,368 17,186 1,184 392,730 3,235 969,184 7,859 91,009 1,188 12,185 3,512 9,485 7,504 6,919 7,36 53,333 1,527 176,252 1,207 47,837	Under 50 Above 50 Tenh. Seam Vessela. 19,165 563,295 37,297 9,540 17,206 44 4,574 94,171 17 1,637 16,573 17 6,244 5,732 17 7,885 14,621 135 5,961 65,172 2,758 1,622 19,116 966 1,122 2,758 1,182 19,116 966 1,183 19,155 5,663 3,235 259,184 27,869 21,009 298 1,183 11,185 7,869 21,009 298 1,183 11,185 7,869 21,009 99 1,193 11,185 167 7,869 6,919 99 1,293 31,010 7,365 53,353 427 1,597 176,252 43 1,907 47,337 67	Under 50 Above 50 Tons. Vessels. 19,165 653,295 37,257 Aberdeen	Under 56	Under 50

Account of the Tonnage of Shipping entering Inwards and Outwards at the principal Ports of the United Kingdom in the Year 1841.

	Coastwise.				Colonial		Foreign Trade				
	Sailing	Sailing Vessels- Steam Vessels-		Inwards Outwards	Inwards.		Outwards-				
	Inwarda	Qurwards.	Inwards.	Cutwards	towarne.	Outwards	British.	Foreign.	Pritish.	Fereign.	
London	2,726,030	777.930	304,683	303,600	474,631	422,809	524,628	317,608	349,577	291,899	
Liverpool		385,709	565,289	524,317	370,850	382,104	285,779	337,888	296,026	350,764	
Bristol	169,813			139,812		45,047	20,800	8,564	16,544	8,619	
Newcastle	239,435					72,942	160,295	113,366	346,212	175,043	
Hull	72,101	70,074	112,842	114,309	45,529	35,134	177,765	119,099	125,847	95,040	
Goole	171,066	176,285	9,935	10,612		200	2,344	3,843	5,180	3,45	
Stockton	61,545	1,014,918	5,982	5,673	8,855	4,684	35,271	17,554		44,81	
Sunderland		659,820	4,837	5,111	11,756	22,910	137,123	39,440	216,771	63,000	
Whitehaven	39,844					24,799	724	268			
Newport	76,952	471,313	79		5,516	5,404	6,554	4,430			
Plymouth		67.774	115,085	26,592	20,760	27,250	14,660				
Swansen	213,243	370,437	26,288	26,288	8,480	6,494		7,914			
Glasgow	172,760	195,343	223,820	231,204	15,779	47,066	24,575				
Greenock	78,254	25,360	62,348		77,765	70,440	10,803	2,035			
Port-Glasgow	8,146	4,392	1,927	4,022	29,264	24,373	1,256		1,612		
Leith	.149,799	112,992	131,045	139,162	15,794	14,833	35,754	49,822			
Dundee	133,541	59,769	33,246	31,309	6,926	6,153	34,809	15,516		B,23	
Aberdeen	136,874	85,296	49,112	51,392	9,832					4,623	
Dublin	355,343	126,209	184,233	223,607	30,078	18,626	10,971	8,839			
Cork	183,816					21,484	8,102			1,948	
Belfast	196,871	59,682	140,719	144,866	21,751	18,302	10,385	4,856	19,370	4,94	

^{*} This return was incomplete at the date when the account was closed.

	TOTALS in 1841.	England,	Sections.	Ireland.	Total.
	Sailing vessels { Inwards	7,305,874 8,965,941	1,119,564 1,187,610	1,211,942 637,801	9,637,380 10,061,352
Coastwise	Steam vessels. Inwards	1,687,013	645,707 552,907	571,064 655,928	2,903,784 2,748,146
Colonial	Inwards.	1,202,004 1,180,434	181,011 214,673	138,471 114,589	1,521,486
B .	((British	1.654.810	146,409	38,506 96,441	1,839,725 1,287,828
Foreign	Outwards Foreign Foreign	1,703,071	182,354 93,484	34,165 20,953	1,919,890

Tonnage of Vessels employed in the Foreign and Colonial Trade of the United Kingdom (including their repeated Voyages), separating British from Foreign Vessels, and distinguishing the Trade with each Country, in 1840 and 1841.

		184	ю.			184	i.	
	Inwards-		Outw	Outwards-		Inwards-		rards.
	British.	Foreign.	British.	Foreign,	British.	Foreign.	British.	Foreign.
Russia	340,567	79,152	225,581	58,861	294,237	75,616	195,604	
Bweden	11,933	53,337	11,760	39,999	13,170	46,798	17,643	35,674
Norway	3,166	114,941	1,732	114,662	977	113,025	2,642	101,321
Denmark	6,327	103,067	92,631	907,113	3,368	83,009	82,090	193,833
Prussia	112,709	237,984	73,943	177,449	88,198	210,254	72,497	165,783
Germany	165,839	88,556	173,110	82,271	188,272	110,348	191,704	91,745
Holland	212,503	69,770	217,665	65,549	212,782	67,946		61,758
Belgium	57,274	48,996	49,457	46,541	69,835	54,941	63,935	40,606
France	393,393	181,497	365,842	179,882	387,934	194,236	434,936	184,469
Portugal, Asores, &c.	61,195	9,767	68,238	30,969	61,161	9,565	61,182	23,501
Scain, Canaries, &c.	50,649	5,892	48,321	14,270	45,508	5,560	58,457	10,339
Gibraltar	23,099		44,395	1,065	23,314		46,663	344
Italy & Ital. Islands	85,576	21,095	63,821	14,043	68,342	12,335	77,595	10,789
Malta & Ionian Isles	10,962		42,288	1,035	16,315	,	54,886	5,431
Turkey & Greece	28,005	1,005	39,530	2,623	27,483	187	55,535	5,615
Africa and African			1	-		1	1	1
Islands	82,528	691	102,306	4,172	111,143	912	129,816	6,390
India, Ceylon,	,			1 7 1	ĺ	1		1
Singapore	137.863		178.834	370	207,075		215,421	
China	20,056		2,942	1.082	23,344		13,738	1,381
Other parts of Asia		1,304	11,716	1,762	14,910	855	13,227	2,886
Australasia	25,905		115,119	218	29,868		195,609	
British America	806,222		694,094	2,213			652,725	384
W. Indies	181,731		222,620	197	174,975		211,536	
Foreign W. Indies	41,174	6,881	36,460	19,646	42,059	2.889	59,462	13.393
United States	138,201	426,867	180,041	409,900	121,777	294,170	159,597	313,390
Mexico and South		,	,		I "'''	1,		,
America	78,533	8.010	90,984	12,989	119,827	5.885	88,714	9,785
Whale Fisheries	14,996		15,276		13,098		10,578	
Jersey, Man, &c.	163,459	2,182	194,978	94	160,901	3,337	132,820	
Total	3,197,501	1,460,294	3,292,984	1,488,898	3,361,211	1,291,165	3,429.279	1,336,892

Further information respecting British shipping will be found under LLOYD'S, STRAM NAVIGATION, TOWNAON, and in the articles referred to on page 610; and respecting the shipping of foreign countries under their respective heads.

SHIPSHUSBAND, the agent or commissioner for the owners. He may be a part-owner or a stranger. His powers are by mandate, commission, or verbal appointment; the latter chiefly where he is also part-owner. His duties are to arrange every thing for the outfit and good order of the ship—stores, repairs, furnishings; to enter into contracts of affreightment; and to superintend her papers. His powers do not extend to the borrowing of money; but he may grant bills for furnishings, stores, repairs, and the necessary engagements binding on owners, although he may have received money wherewith to pay them. He may draw the freight; but is not entitled to take bills instead of it, giving up the lien by which it is secured. He cannot delegate his authority.

SHOE-TRADE. This trade, in which we include the manufacture of boots, is generally followed in all parts of the kingdom; but, though employing a greater number of persons than any of the other common handicrafts, it scarcely rises any where into importance except in London, Northampton, and Stafford, where the public contracts are chiefly executed, and supplies furnished for exportation. In these places a considerable division of labour has been introduced into the trade,

no fewer than twent, distinct branches being distinguished. This is particularly the case in what is called the men's tine.

the case in what is called the men's time.

Shoes and boots, as articles of export, occur principally in the colonial trade; but being included in the customs accounts under the general head of "leather wrought and unwrought," the amount shipped cannot be stated. They also occur as imports in our trade with France, especially light shoes for females, and men's boots; the latter are of neat workmanship, and are said to be in other respects of good quality. This trade will probably increase; as, in the new tariff (1842), the import duties on boots and shoes, formerly about 30 per cent., have been reduced fully one-half. Before this reduction, the imports from France amounted to about 50,000 pairs per annum. 50,000 pairs per annum.

We possess few data for determining the value of the boot and shoe trade in the United Kingdom; but the annual consumption, estimating the average expenditure of each individual of our population of 27,000,000, at the moderate rate of 10s., will

amount to £13,500,000.

or each individual of our population of 21,000,000, at the indicate rate of 10s., will amount to £13,500,000.

SHOP (Fr. Boutique. It. Loja), a place for the sale of commodities by retail. Shops are now, generally speaking, arranged indisoriminately; but the old custom, and one probably coeval with the existence of cities, was to appropriate particular streets to particular trades; and some relics of this usage still remain in London. Paternoster Row continues to be much occupied by booksellers; Lombard Street, by bankers; Long Acre, by coachmakers; and Cranbourne Alley, by straw-hat-makers; while Holywell and Monmouth Streets still uphold their ancient reputation for old clothes, and Broker's Alley is crowded by dealers in second-hand furniture. In London, the number of shops is estimated at about 40,000. Many of these, as well as in the provincial cities, attract attention by a gorgeous display of wares in plate-glass windows, comprising almost their entire front, while their interior is frequently lined with mirrors. Every sort of device, in short, is used to attract notice and custom. In 1785, a tax was imposed on shops in Britain, but it was abolished in 1789.

In America, instead of shops, unostentatious warehouses, called stores, are commonly used by retailers; and in the East, this class, as well as the common handicrafts, are generally arranged, in each city, in a place exclusively appropriated to them, called a Bazzala.

SHRIMP (Crangon vulgaris), a crustaceous fish, common on the shores of England, and brought in large quantities to Billingsgate, chiefly from Gravesend, and brought in large quantities to Billingsgate, chiefly from Gravesend, and brought in large quantities to Billingsgate, chiefly from Gravesend, and brought in large quantities to Billingsgate, chiefly from Gravesend, and brought in large quantities to Billingsgate, chiefly from Gravesend, and brought in large quantities to Billingsgate, chiefly from Gravesend, and brought in large quantities to Billingsgate, chiefly from Gravesend,

land, and brought in large quantities to Billingsgate, chiefly from Gravesend. Lynn, Boston, Leigh, and Isle of Wight. Shrimps are boiled before being carried Lynn, Doston, Leign, and isse of Wignt. Shrimps are bolled before being carried to market; they are in season during the whole year, though the chief demand is in spring. Those of Pegwell Bay are preferred; and the preparers of potted shrimps profess to make use of them only.

SHROFF, SHROFFAGE. Shroff, in Indian commerce, means a banker or money-changer. Shroffage is the examination of coins, and separation of the good from the debased. [INDIA.]

SHRIER a company disport made of spirit acid fruit and green.

from the debased. [INDIA.]

SHRUB, a compound liquor, made of spirit, acid fruit, and sugar.

SIAM, a state in the peninsula of India, bounded N. by China; E. by Annam;

S. by Gulf of Siam; and W. by Birmah. Area, 190,000 sq. miles. Population,
3,000,000. It comprises Siam Proper, part of Laos and Cambodia, and certain
tributary Malay states. Capital, Bankok, a flourishing port on the Menam, in

stat. 13° 58' N., and long. 100° 34' E., about 20 miles from the sea; pop. 90,000;
about 4-5ths are Chinese. Government, a despotic monarchy: the king is nominally a vassal of China. S

The kingdom is generally mountainous. The fertile part is composed chiefly of the valley of

nally a vassal of Chins.

The kingdom is generally mountainous. The fertile part is composed chiefly of the valley of the Menam, a large river which descends from the heart of Thibst, and at certain seasons overflows and inundates a considerable portion of the country. Of the climate little is known beyond Bankok, which is represented by Mr Crawfurd as being far from unhealthy. Mines exist in different places, but they are yet almost unexplored. Tin, copper, lead, sinc, antimony, with small quantities of gold, are found; but the metal which occurs in greatest relative abundance is fron, particularly on the Menam. The vegetable productions differ in no essential respect from those of other Indian countries. The district within the tract of inundation is admisbly suited for rice; and, excepting Bengal, the quantity exported is greater than from any country in Asia.

The inland and coasting trades are considerable. The former is principally conducted on the Menam and its branches in fast boats and bandoo rafa; but a large portion is likewise carried on by means of elephants, which are generally used for land carriage. The latter embraces a considerable traffic with the countries on the shores of the Straits of Malacca and Bay of Bengal, by which channels are imported opium, cotton goods, and other commodities. The martime commerce with foreign countries is almost whoily concentrated at Bankok, which, after Canton, is the greatest shipping port in Asia not settled by Europeans. The most important branch is that with China; the staple exports consisting of black pepper, sugar, stick lac, sapan wood, cardamous, cotton-wool, eagle-wood, rice, hides, gamboge, and wood for furniture; and the imports, of coarse clima-ware, teas, and raw and wrought sikis, with a quantity of Chinese silver in ingots: in this trade are

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employed about 35,000 tons of junks, which arrive in January and February, and leave in June and July. Considerable intercourse exists also with the ports of Cambodia and Cochin China; but the most extensive branch, after that with China, is conducted with Singapore, Malacca, Penang, Batavia, and other places in the Malayan Archipelago. In this trade the staple exports of Siam are sugar, salt, oil, and rice; to which may be added the minor articles of sick lac, iron pans, coarse earthenware, and lard. The returns are British and Indian pleco-goods, opium, with a little giase-ware, and some British woollens from the European settlements, with commodities suited for the Chinese markets, such as pepper, tin, dragon's blood, rattans, bechee-de-mer, wallows' nests, and Malayan camphor from the mative ports. This trade is extilenents, with commodities entirely by means of junks, and has greatly increased of late year.

Almost every kind of merchandise, except sugar and pepper, is the subject of royal monopoly; and the Chinese are the only foreigners whose trade is upon a liberal footing. In 1929, Mr Crawfurd, as representing our Indian government, effected a commercial treaty with the King Siam; and 100 sen = 1 yuta. The sen is also measure is the catty = 24 list.

Money.—The circulating medium is stated by Mr Crawfurd (Embassy to Siam, \$c.), to consist to the Chinese. In weighing rice and salt a large measure is used, consisting of \$2 peculs to the store of the state

a square measure of 90 fathoms to the side. The ordinary measure is the catty = 32 lbs. avoirdupois, being double the Chinese clay. The pecul contains 50 catties, and is thus equal to the Chinese. In weighing rice and sait a large measure is used, consisting of 92 peculs to the former and 25 to the latter: rice is also measured by the basket, 100 of which are equivalent to the large measure above mentioned. ge measure above mentioned

SICCA, a weight for gold and silver in India = 1791 troy grains.

SLUCA, a weight for good and silver in India = 173 truy grains.

This was the weight of the ancient standard rupee of Hindostan, while the Mogul emperor was
the sole sovereign, and which was thesee denominated the sices rupes. In course of time this
standard, though professed to be followed, was gradually altered by the powers established in different parts of India; some being lighter, and others, as the Calcutta sices rupes (weighing 191916
grains, of which 175 921 pure), heavier than the Hogul money. To remody the confusion thence
arising, an ideal standard, called the current rupes, was introduced, to which all others were to
be compared before they were entered into accounts. 116 current rupes = 100 Calcutta sices
rupess. The East India Company's rupes, now the general standard, weighs 180 troy grains, or
160ts, which is also the basis of the new system of weights. [INDIA.]

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SICILY, the largest and most fertile island of the Mediterranean, forms, with the Neapolitan territory, from the south extremity of which it is separated by the Strait of Messina, the United Kingdom of the Two Sicilies. Area, 10,508 sq. miles. Population in 1842, about 2,100,000. The head of the political administration is a lieutenaut-general, representing the king; but all important matters are referred to the Sicilian section of the council of state at Naples. \$\frac{8}{2}\$

The island, triangular in form, is traversed along its N. side by a chain of mountains, which gives off several branches to the S.; besides which, there are several detached groups, including the celebrated Eine, in height 10,872 feet, near the E. coast. There are some extensive plains; but, generally speaking, the island consists of hill and valley,—the whole watered by numerous neal rivers. The climate is salubrious and delightful, except during the sirocco, and in some low and marshy tracts.

The difference of elevation in Sicily, and its fertility and climate, naturally give great variety and excellence to its productions. Anciently it was styled the granary of Rome; but in modern times, sloth, ignorance, political dependence, and misgovernment, have brought its prosperity to a comparatively low abb. Of late, however, some beneficial changes have taken place; in 1812 and 1838 laws were passed for the abolition of the feudal system, and the emancipation of the peasantry; restrictions which existed to the exportation of corn have been removed; and, more recently, funds have been raised for the formation of good roads.

The arable lands comprise 3,700,600 acres; vineyards, chiefly around Marsala, 115,000 do.; gardens, 260,000 do.; woods and olive groves, the latter principally on the N.

ports were valued officially at £358,598, but they may be more correctly estimated at £1,000,000; many commodities, especially sugar and other tropical products, being smuggled in consequence of the high customs and tounage duties. The shipping amounted in 1836 to 2250 vessels, 43,000 tons; employing nearly 25,000 men. [SULPIUL.]

PORTS.—Fulermo, the capital, is situated in a bay on the N. coast, in lat. 33° 8′ N., long. 13° 8′ E., in a fertile plain between two mountain ridges and the ses. Pop. 140,000. The harbour, which is at some distance, is formed by an artificial mole, which, however, does not protect it effectually. In 1838, according to Mr Macgregor's Report on Sicily, the imports amounted to £294,009; and the exports to £346,310.

Messina, the chief trading port, lies on the N. E. coast, opposite Calabria, in lat. 38° 11′ N., long. 15° 34′ E. Pop. 85,000. The town rises in the form of a crescent on the W. side of the harbour, which is one of the best in the Mediterranean. In 1839, the imports amounted to £294,811; and the sports to £388,492.

Alicata, Catania, Cefalu, Girgenti, Marsala, Marsara, Sciacca, Syracuse, Trapani, Terra Nova, and Termini, are the chief other ports.

MEASURES, MONEY, REVENUE, &c.

or 95 inches = 81.35 Imp. inches; and 3 paimi = 1 bracelo.

The salm of land = 5½ Imp. acres.

The tonns, wine measure, of 4 barili, 8 quartare, or 160 quartucci, = 31.24 Imp. gallons: the pipe is 12 barrels, = 93.72 Imp. gallons: The salms generale, corn measure, of 4 bisaccie, 16 tomoli, or 64 modelli, = 11½ staja Leghorn measure, = 741 Imp. bushels: the salms grossa, similarly divided, = 14 staja, Leghorn measure, = 944 Imp. bushels:

The cantaro grosso of 100 rottoli grossi, each of 33 ounces, = 195-53 lbs. avoirdupois: the common cantar, or cantaro sottile, of 100 rottoli sottili, each of 30 ounces, = 195-03 lbs. avoirdupois; and 100 Sicilian lbs. of 12 ounces = 4901 troy grains; and 100 Sicilian lbs. of 12 ounces = 7001 lbs. avoirdupois. The weight and fineness of the precious metals are expressed as in NAPLES.

The Sicilian ship tom = 5 Sicilian salmes = 94 cubic French feet (pteds de Roi).

N.B.—In Messina, oil is sold by the caffiso, SIERRA LEONE. [Nigrita.]

MEASURES, HONEY, REVENUE, &C.

Measures and Weights.—The canna of 8 palmi or 96 inches = 31:35 Imp. inches; and 3 palmi = 1 braccio.

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The salma generale, corn measure, of 4 bisaccio. 16 tomoli, or 64 mondelii, = 112 state = ±1.

The oncia = 3 Neapolitan ducats (valued in gold), = 10s. 3½d. sterling; and 58 tari 6 grani acris. 16 tomoli, or 64 mondelii, = 112 state = ±2.

gold), = 10s. 3jd. sterling; and so vari o grain = £1.

The Sicilian dollar or scudo of 2 florini, 12 tari, 24 carlini, 180 pont; or 240 grain; is worth 3s. 11jd. sterling. The Sicilian tari and carlini are thus of only one-half the value of the same denominations in Naples.

Since 1818 the coinage of Sicily has been the same as that of Naples.

Bills on London are commonly drawn at 3

same as that of Naples.

Bills on London are commonly drawn at 3 months' date. No days of grace are allowed.

The Revenue, derived principally from a land-tax of 19½ per cent., a tax of 13 taris 12 grains per salma on the grinding of corn, and customs and navigation dues, amounts annually to about £1,000,000, gross. [NAPLES.]

SIERRA LEONE. [NIGRITIA.]
SILK (Du. Zyds. Fr. Sois. Ger. Seids. It. Seta. Por. & Sp. Seda. Rus. Schelk), a soft shining filament, the product of several species of caterpillar, particularly the Bombyx mori or silkworm. This worm is about six or eight weeks in arriving at maturity, during which period it changes its skin four or five times; in arriving at maturity, during which period it changes its skin four or nev times; and ceases to feed for a short time previous to each change. When full grown it eats no more; but, choosing a convenient place, begins to discharge viscid pulpy twin filaments from the double orifice of its nose, with which it instinctively envelops itself as a defence against living enemies and a change of temperature; and it continues this operation till it has spun an oval case or ball, in which it remains as a chrysalis for about fifteen days, at the close of which it perforates the end of the cilken ball and comes out a winged much to denotit its eggs for a fresh of the silken ball, and comes out a winged moth, to deposit its eggs for a fresh generation, and very soon after to die. Those who cultivate the worm for silk do

generation, and very soon after to die. Those who cultivate the worm for silk do not suffer it to reach this last stage, because the silken fibre would be cut into small pieces, by the opening at which the moth escapes. When the whole quantity of silk is formed, they destroy the chrysalis by means of heat.

Silk occurs in various forms. Cocoons, Knubs, or Husks, are the balls as formed by the worm, about the size of a pigeon's egg, and of a golden-yellow colour. Raw silk, the state when simply wound off the cocoons into skeins or hanks, is in threads composed of several fibres, united by their natural gum. Waste silk is that part which is first wound off the cocoons in the operation of reeling; and such cocoons as being eaten through by the worm cannot be wound off by the reel, but are afterwards carded and spun; also of short ends arising from winding.

Raw silk, before it can be used in weaving, is made to take one of three forms: lst. Sinoles. the most simple process, consists in merely twisting the double

lst, Singles, the most simple process, consists in merely twisting the double thread projected from the twin orifice in the nose of the insect, in order to give more firmness to its texture: 2d, Tram, formed by twisting together, not very closely, two or more threads of raw silk; and this description most commonly forms the west or shoot of manufactured goods: 3d, Organsine, principally used in the warp, that is, to form the length of the web, is composed of two or more threads twisted separately, and afterwards combined together, the twist being then given in contrary directions. When thus prepared it is termed thrown silk. The worms are fed with the leaves of the mulberry-tree; and they are reared

in a kind of nursery, called by the French a magnanièrs. Silk husbandry is extensively prosecuted in the south of Europe—in Italy, where the annual production is about 12,000,000 lbs., chiefly in the northern states, and in France; also in China, India, and Persia. It is likewise pursued on a smaller scale in many other countries possessing a soil and climate favourable to the growth of the mulberry. The Indian silk, produced from a worm and leaf peculiar to Bengal, is inferior to that of France, Italy, and China, all produced from the Bombys mori, reared on the white mulberry.

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to that of France, Italy, and China, all produced from the Bomoga more, reason the white mulberry.

About 5,000,000 lbs. raw, waste, and thrown silk are annually consumed in this country. It is imported chiefly from Bengal, and from Italy, either direct or through France; it is also brought in considerable quantities from China (where, next to tea, it is the great staple) and Turkey; and in smaller quantities from Itolland, the United States, and other places. [SILK MANUFACTURE.] \$\frac{\text{SILK GUT}}{\text{SILK GUT}}\$, a hard, white, transparent thread, about a foot in length, made in China and Italy from the intestines of the silk worm, and used for angling.

SILK MANUFACTURE. This manufacture originated in China, from whence, according to the best credited accounts, it was carried to Constantinople by Persian missionaries in the reign of Justinian, A. D. 550. Its progress was at first slow,

according to the best credited accounts, it was carried to Constantinople by Persian missionaries in the reign of Justinian, a. D. 550. Its progress was at first slow, and for 600 years was confined to the Greek empire. In the 12th century, however, it was extended to Palermo in Sicily, and from thence by degrees into Italy, Spain, and eventually to France, in which it had effectually taken root prior to the reign of Francis I. Its early history in England is involved in obscurity; but the reign of Edward III. is commonly assigned as the period of its introduction into this country. It attained a certain extent in the 16th century, particularly in the days of Elizabeth, when a number of Flemish workmen settled in her dominions in consequence of the persecutions of the Duke of Alva: and a further stimulus into this country. It attained a certain extent in the 16th century, particularly in the days of Elizabeth, when a number of Flemish workmen settled in her dominions in consequence of the persecutions of the Duke of Alva; and a further stimulus was given to it in 1685, by the repeal of the Edict of Nantes, and the removal in consequence of a number of French Protestant weavers to England. Numerous laws were passed for the protection and encouragement of the manufacturers; and in 1765, the importation of foreign silks was strictly prohibited. This law gave to the English manufacturers a monopoly of the home market, from which, in the then imperfect condition of the trade, they would have been driven by foreign competition; but it did not secure to them prosperity. By withdrawing a powerful incentive to economize the processes, silks continued a high-priced luxury, accessible only to the wealthier classes, and of course liable to all the caprices of fashion; while the imposition of heavy taxes on the raw material, and the competition of the smuggler, tended farther to increase the evil. Under the combined influence of these causes the trade increased slowly; those who embarked in it were exposed to continued alternations of prosperity and distress; and down to 1824, the silk manufacture, notwithstanding all the protection it had received, could not be said to be firmly established. In that year, however, influenced by the suggestions of Mr Huakisson, a bold and enlightened policy was adopted by our government. The high duties of 4s. per lb. imposed upon raw silk, and of 14s. 8d. per lb. upon undyed thrown silk, were reduced; the former to 3d., and the latter to 7s. 6d. per lb.; and in 1829, to the rates of 1d. and 8s. 6d. respectively. The prohibitory act of 1765 was also repealed, and a scale of duties adopted (equivalent to 30 per cent.

Inc.; and in 1829, to the rates of 1d. and 8s. 6d. respectively. The prohibitory act of 1765 was also repealed, and a scale of duties adopted (equivalent to 30 per cent. ad valorem), under which foreign manufactured silk goods might be imported after reduced to 1s. the tariff of 1842, the duty on undyed thrown silk was farther reduced to 1s. the lb.; but no alteration was made on the rates on manufactures. The consequence of Mr Huskisson's reductions was a great and sudden increase of the silk-trade. The manufacturers at first suffered severely from foreign competition; but this evil was partial and temporary. Stimulated by that rivalry, such improvements were effected in the quality of our fabrics as rendered them equal, and in some cases superior, to the most beautiful productions of other countries. At the same time, by the reduction of the cost of the raw material, and by conducting the several processes upon a scale, and according to principles, admitting of great economy, British silks have not only been placed within the reach of the humbler classes, but in other markets have been brought into successful competition with those of foreign production.

As this country is entirely dependent upon foreign states for the supply of the raw material, the quantity of goods made must be proportional to the unmanufactured silk imported. In the 10 years preceding 1824, the quantity of raw and thrown silk used amounted to 19,409,020 lbs., being an average of 1,940,902 lbs. per annum; and in the 12 years following the change of system, the quantity used was 49,975,331 lbs., or 4,164,444 lbs. per annum, being an increase over the average

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of the former period of 114 per cent. (Porter's Progress of the Nation, § 2, ch. ii. p. 256.) It is further remarkable that, notwithstanding this increase, the importation of thrown silk has of late sensibly diminished. The spur of competition has led to the introduction of improved machinery into our throwing mills, the effect of which has been to lessen by more than one-half the cost of the process. Both branches of the manufacture have been thus prodigiously expanded; so that in every article of plain manufacture, and of what are called heavy goods, we have now little to apprehend from the free competition of our neighbours; while in regard to mixed goods, composed partly of worsted or cotton and silk, we stand without a rival. It is chiefly in light and fancy articles, the work on which is proportionally greater with reference to their value than where a larger quantity of material is used, that the competition of foreigners, owing to their cheaper rate of labour, is successful. The Lyonese manufacturer is, besides, entitled to a preference for his fancy goods, as a reward for the superior taste and ingenuity displayed by him in the invention of patterns and the combination of colours. This superiority is owing chiefly to the gratuitous instruction which is afforded to the work-people in drawing and designing in a great school of arts at that city; but the increasing attention now paid to these subjects in this country, affords reason for hoping that, even in the fancy department, the British manufacturer will not be long behind his foreign competitors.

The numerous fabrics woven from silk may in general be classed under the head of Broad Silks, comprehending velvest, damaski, astins, levantines, droved contents.

turer will not be long behind his foreign competitors.

The numerous fabrics woven from silk may in general be classed under the head of Broad Silks, comprehending velvets, damasks, satins, levantines, ducapes, gros-de-naples, sarcentes, persians, gause, &c.; Cruper; Handberchiefs, embracing bandanas, barcelonas, and similar textures; Ribands; Hose and gloves; Mixed goods, comprehending bombaxines, poplins, lustres, shawls, and all the fabrics in which silk forms a component part. [See these different seads.] Silk is, besides, used in the manufacture of a number of small articles.

A variety of processes are followed. In weaving plain goods, a simple loom is employed, which in construction does not materially differ from that used for other fabrics; but figure-weaving, or the art of producing various patterns in the cloth, is generally performed by a loom invented by M. Jacquard, an ingenious but unfortunate weaver of Lyons. The Jacquard loom was introduced into this country; and as by its means the most beautiful products can be accomplished by men of ordinary skill, and with little more labour than that required for the plainest goods, it has entirely taken the place of every other method of figured silk weaving. Power-weaving is employed for the production of both broad silks and ribands; but owing to the delegacy of the texture of silk, it is not considered susceptible of much extension in any save common articles. It is prosecuted chiefly in factories in Cheshire, Lancashire, and Norfolk.

The principal seats of the manufacture in this country are,—for broad silks, Spitalfields, Manchester, Macclesfield, Glasgow, Palsley, and Dublin; for crapes, Norfolk, Buffolk, Resex, Mid-clesex, and Somerast; for handkerchiefs, Manchester, Macclesfield, Palsley, and Glasgow; for ribands, Coventry; for hosiery, Derby; and for mixed goods, Norwich, Manchester, Paisley, and Dublin. The annual value of the manufacture is estimated at nearly £10,000,000; more than 9.10ths of which are for home consumption.

Dublin. The annual value of the manufacture is estimated as nearly \$10,000,000; more uan 9-10ths of which are for home consumption.

The foreign states in which the manufacture chiefly exists are China. India, France, Italy, and Switzeriand. The importations into this country are almost wholly from France and India; the former consisting chiefly of plain and figured silks, ribands and gauses, millinery and made-up goods, with a small quantity of crape and velvet; the latter chiefly of bandsnas and other hand-kerchiefs. Only about 1-5th of the importations from India is entered for home consumption, the remainder being re-exported to France, Germany, Spain, and America.

Progress of the Silk Trade of the United Kingdom from 1827 to 1840.

	1827.	1830.	1835.	1840.
French or European silks (exclusive of lace and millinery) entered for home				
consumption	115,278	196,370	160,840	943,946
pieces,	55,183	77,953	162,827	100,838
Crape, shawls, scarfs, gown pieces, &c., do	24,900	17,620	2,740	463
Raw and waste silk, do	18,1 <i>5</i> 0 3,7 <i>5</i> 9,138	2,978 4,256,982	1,813 5,406,846	1,990 4,531,115
Thrown silk, do	454,015	436,535	251,370	288,147
clared value£	236,344	578,048	973,786	792,648

The exports of British silks are chiefly to the United States and the Colonies; they are also shipped to S. America, Germany, Belgium, and even India and France; to which last, goods to the amount of about £50,000 are now sent annually.

In 1861, the declared value of silk manufactures exported was £1,134,931; of thrown silk, twist or yarn, £198,638: total, £1,331,359. But see Supplement.

For further information, we must refer to the volume "Silk Manufacture" of Dr. Lardiner's Cabinet Cyclopusdia, and to Dr. Ure's Philosophy of Manufactures, &c.

SILVER (Fr. Argent. Du Zilver. Ger. Silber. It. Argento. Por. Prata Rus. Serebro. Sp. Plata. Per. Nohra), a metal of a beautiful white colour and

Sp. gr. 10.5. In malleability and ductility it exceeds all metals except gold. It may be extended into leaves not exceeding 1-10,000th of an inch in thickness, and drawn into wire fluer than a human hair. Fusing point, 1873° Silver is one of the metals which have been longest known; and its ses are numerous and important. Alloyed with copper, it is employed throughout the world for coins, and in the manufacture of a variety of articles of household furniture and ornament, for which purpose it is well adapted by its great unalterability. In the arts it is extensively used, particularly for silvering or plating other metals. The oxide of silver is used for colouring porcelain. The nitrate of other metals. The value of any is used to coloring porclaim. The intrace of silver is the strongest and most manageable caustic known in surgery.

Silver occurs in the metallic or native state in fine filaments, disseminated through

Silver occurs in the measure of the control of the

in combination with other metals, and with sulphur. The great source of supply is Mexico; but considerable quantities are also obtained in Peru, and other parts of South America, Russia, Austria, and Norway. In England it is found in small quantities in the lead mines. [BULLION. COIN. PLATE.]

SIMARUBA, the tough, fibrous, bitter bark of the Quassia Simaruba. It is imported in bales from the W. Indies; and its infusion is used as a tonic.

SINGAPORE, a small island at the eastern extremity of the Strait of Malacca, the site of a flourishing British settlement. Length, 25 miles; breadth, 15; area, 270 sq. miles. The town is situate in lat. 1° 17′ N., and long. 103° 51′ E. Population, 60,000, mostly Chinese and Malays. The island belongs to the East India Company.

sq. miles. The town is situate in lat. 1° 17′ N., and long. 103° 51′ E. Population, 60,000, mostly Chinese and Malays. The island belongs to the East India Company. This estitement was projected by \$\text{Sit Biand for Raffles in 1816 as a emporium for the commerce of the Eastern Islands,—the British intercourse with which had materially suffered by the restoration of Java to the Dutch at the close of the war. The Island was purchased from the Princes of Schore in 1819, and its sovereignty confirmed to Great Britain in 1826, by a convention with these princes and the King of Holland. Its climate is highly salubrious, being freshened with sea breezes. The rainy months are the coldest, namely, December and January; and the driest months, April and May, the hottest. Being, however, not above 80 miles from the equator, there is little variety in the seasons, and Fahrensheit ranges only from about 70° to 90°. Fruits, catechu or gambler, and a few spices, are the only vegetable productions of the island deserving of notice; and the preparation of pearl sage and iron implements by the Chinese are almost the sole manufactures. Singapore derives its importance solely from being an entrepôt for the commerce between Reastern and Western Asia, and also between the latter and Europe. For this it is admirably suited by its geographical position, being in the direct track of vessels going betwirt the Indian nislands. When founded in 1819 it was inhabited by only a few hundred Malay fishermen; but in a very few years it became, next to Batavia, the greatest port in the Rastern Archipelago. The town is situate on a salt creek near the W. part of a bay on the S. coast. Ships ile in the roads at the distance of from one to two miles according to their draught; but cargoes are discharged or taken in with safety by means of lighters. All provisions, except fish, are dear. Singapore is in every respect a free port, there being neither import or export duties, nor harbour or shipping dues. The mode of transacting business is describe

MEASURES, MONEY, &c.

the corge or score. The gold and silver weight is the buncal, which weights 2 dollars, or 833 troy grains. British measures and weights are gene-rally employed in the sale of European commo-

dities.

Money.—Accounts are stated in Spanish dollars divided into 100 cents; also in rupces, annas, and piec, as in Invial. Bills are commonly drawn on London at 6 months' sight; and on Calcutts, Bombay, Madras, Batavia, and Canton, at 30 days' sight.

SINKING FUND. [INTEREST (COMPOUND) AND ANNUITIES.] SIZE, a gelatinous substance, obtained from parchment shavings, fish skin, and

several animal membranes. It is less adhesive than glue; and is used by book-binders, paper-hangers, and painters. Sometimes it is mixed with flour and gum. SKATE on RAY, a flat fish (Raia), of a rhomboidal form, with a long narrow tail. Eight or nine distinct species frequent the British coasts.

tail. Eight or nine distinct species frequent the British coasts.

As food, the skate is held in very different degrees of estimation in different places. In London, particularly, large quantities are consumed, and the fieah is considered delicate and well flavoured; but in some parts of the coast it is seldom devoted to any purpose beyond that of baiting pots for catching crabs and lobsters. Skate are in the best condition for the table during autumn and winter. In spring, and in the early part of summer, they are usually maturing eggs or young; and their flesh is then soft and woolly. The French are great consumers of skate.

SKINS (Fr. Peaux. Ger. Felle. It. Pelli. Por. Pelles. Sp. Pieles), as distinguished in commerce from HIDES, are those—such as calf, goat, kid, and lamb skins—which, when prepared, are used in bookbinding, glove-making, and other lighter descriptions of leather-work. Calf and kip skins are largely imported from Russia and Germany. Kip is a term used in trade to distinguish heifer-skins, or such as are between the ox and cow hide and the calf-skin. Gest-skins are brought chiefly from Morocco and other parts of Barbary. Cape of Good Hope, India. France. chiefly from Morocco and other parts of Barbary, Cape of Good Hope, India, France, and Germany. Kid-skins are extensively imported for the glove-manufacture, both in a dressed and undressed state; the former solely from France, the latter mostly from Italy and India. Lamb-skins are brought in considerable numbers—from

from Italy and India. Lamb-skins are brought in considerable numbers—from 1,500,000 to 2,000,000 annually—from Italy and the adjoining islands. The chief other kinds which enter into our import-trade are deer-skins from the United States, and seal-skins from British America. [Fur Trade.] SLATE (Fr. Ardoiss. Ger. Schiefer), a laminated stony substance, of which there are many kinds; though the only one of commercial importance is clay-slate, employed for roofing. It is also used in large slabs to form cisterns, for shelves in dairies, for paving the floors of cellars and warehouses, and for other purposes for which its strength, durability, coolness, and the ease with which it can be cleaned, owing to its non-absorbing property, adapt it: some fine varieties, rubbed

for which its strength, durability, coolness, and the ease with which it can be cleaned, owing to its non-absorbing property, adapt it: some fine varieties, rubbed smooth with sand, are likewise employed as a writing material, forming the well-known school-slate. The principal slate-quarries in Britain are in Wales, Cumberland, and Scotland; the most extensive being in Carmarthen, near Bangor, and at Easdale and Ballachulish in Argyllshire.

The chief other kinds are, Polishing-slate, a light brittle substance of a creamyellow colour, found at Zwickau in Saxony, Bilin in Bohemia, and Auvergne; and Drawing-slate, of a grayish-black colour, used for crayons, the best kinds of which are found in Spain, Italy, and France.

SLAVE-TRADE. "The principle of co-operation," according to Mr Wakefield, "explains the origin of slavery, the abolition of slavery is mome countries, and the steady progress which slavery is making in others." "All nations, or nearly all, have undergone the state of slavery, sometimes making slaves of the people of the country, sometimes obtaining slaves by means either of purchase from other nations, or of war; and it is equally remarkable, that wherever population has increased so as to render land scarce, so as to provide for the combination of free tions, or of war; and it is equally remarkable, that wherever population has increased so as to render land scarce, so as to provide for the combination of free labour, slavery has either assumed a very mild form, or has been wholly abolished. It is also remarkable, that slavery was revived in America by nations which had lately abolished it in Europe. Bodies of emigrants from Spain, England, and other European countries, settled in America, and took possession in every case of such a quantity of land, that there was enough, and more than enough, for all the settlers. With such abundance of land that every one could readily obtain a piece for himself, there would have been little combination of labour amongst these people, if they had not obtained slaves who might be compelled to help each other. All of these bodies of settlers did obtain alaves of one sort or other; either red men, the natives of the country, or black men purchased in Africa, or crimi-

other. All of these bodies of settlers did obtain slaves of one sort or other; either red men, the natives of the country, or black men purchased in Africa, or criminals transported from Europe, or Europeans, not criminals, who were kidnapped and sold like the black natives of Africa." (Edition of the Wealth of Nations by the Author of England and America, vol. i. p. 45-47.)

The practice of purchasing African negroes for the purpose of employing them in the mines and plantations of America, was begun by the Portuguese in 1503, and it gradually increased with the extension of European settlements in the New World. In course of time, the atrocities with which it was attended attracted the notice of philanthropists; and in 1788 they were brought before the House of Commons by Mr Wilberforce; through whose exertions, aided as they were by several of the most eminent statesmen of the day, and supported throughout the kingdom by the powerful agitation of Thomas Clarkson, Zachary Macaulay, and others, chiefly members of the Society of Friends, an act was passed, March 25,

1807, prohibiting slave-trading in the British colonies from and after January 1, 1808. This statute, however, merely subjected offenders to pecuniary penalties; and it is only since 1811, when, by Mr Brougham's exertions, slave-trading was enacted to be felony, that it has entirely ceased in our colonies.

At the close of the war (1814-15), the British government endeavoured to obtain the concurrence of foreign powers in the abolition; and eventually the whole of them passed laws prohibiting the traffic. They all likewise agreed to a mutual right of search, except the United States; though this power was the first to prohibit the importation of negroes.

The exertions of the abolitionists in Britain were then directed with augmented energy against the existence of slavery itself; which at length was abolished throughout the colonies by the statute 3 & 4 Wm. IV. c. 73, which enacted, that on August 1, 1834, the slaves then existing were to become apprenticed labourers; throughout the colonies by the statue 3.2° with $1.3.2^{\circ}$, which elacted, that on August 1, 1834, the slaves then existing were to become apprenticed labourers; the term of their apprenticeship being fixed to expire partly on August 1, 1838, and partly on August 1, 1840, when they were to become altogether free. To attain this mighty object, there was voted to the planters, as compensation, the sum of £20,000,000; which was distributed as follow.

	Average Value of a Slave from 1822 to 1830.	Number of Slaves.	Relative Value of the Slaves.	Share of the L.SO,000,000 to each Colony.
Bermuda Bahamas Jamake Honduraa Virgin Islands Antigua Montserrat Nevia St Christophera Dominica Barbados Grenada St Vincenta Tobago St Lucia Trinidad British Guiana Cape of Good Hope. Mauritius	29 18 94 44 15 24 120 4 76 31 16 17 32 19 104 36 17 102 36 6 104 43 8 74 47 1 34 59 6 0 59 6 0 59 6 8 45 12 04 10 4 11 15 4	4,203 9,705 311,692 1,990 1,990 29,57 6,365 8,792 20,650 14,384 82,607 11,621 11,348 22,365 22,967 11,621 11,348 22,356 84,915 38,497 68,613	L. 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	103,558 18 5 38 151,007 2 112-35 331,630 10 72-83 375,923 12 84-30 1,721,345 19 7 67 616,444 17 7 43 592,508 18 03-93 234,064 4 112-56 335,627 15 112-19 1,039,119 1 34-11
·		780,993	45,281,738 15 104	20,000,000 0 0

Besides Great Britain, the northern states of the N. American Union, and the Spanish American republics, have emancipated their negroes; but slavery still exists in most other parts of the western hemisphere. According to the latest accounts, the number of slaves in the southern states of the N. American Union is 2,500,000; in Brazil, 3,000,000; and in Cuba, Puerto Rico, and other places, 520,000; in all which there is of course still an extensive traffic. In addition to this internal trade, however, negroes are extensively imported into Brazil, Cuba, and other places, notwithstanding the treaties to the contrary, and the maintenance by Britain of cruisers for the purpose of securing their fulfilment. This illicit trade is chiefly followed on the African coast, between the Niger and Angola; and its extent shows that it must be connived at by the local authorities of those states, or that they are unable to prevent it. It is further Niger and Angola; and its extent shows that it must be connived at by the local authorities of those states, or that they are unable to prevent it. It is further to be regretted, that, since the slave-trade has been declared illegal, the sufferings of the negroes have been greatly increased, owing to its being necessary to coop them up in small compass in their passage across the Atlantic, the better to avoid the British cruisers, while a pursuit by the latter often leads to their being thrown overboard. The loss of life in the middle passage is supposed to average one-fourth of the cargo; which is exclusive of that produced by the wars among the African tribes, in order to procure captives for the slavers, and by the "seasoning" of the negroes after their reaching the American main or the West Indies. The commodities given in exchange for the slaves in Africa consist chiefly of coarse arms and gunpowder, imported into Braxil and other places expressly for this infamous traffic from England and Belgium, the common cotton fabrics well known in the British manufacturing districts under the name of "coast goods," and the other articles peculiar to the African trade detailed under the head Nigerita.

The shipping craft employed is chiefly of the build of the United States. The negroes seized on board slave-vessels by the English cruisers are, we may add, generally carried to the British settlement of Sierra Leone.

In addition to the trade in slaves on the western coast of Africa, there is a pe-

riodical exportation of them by caravans from Soudan to the Barbary States and to Egypt. Many of these, according to Dr Bowring (Report on Egypt, p. 87), are boys who have been cruelly mutilated at Kordofan for employment in the harems. There is also a considerable alave-trade carried on by the subjects of the

harems. There is also a considerable slave-trade carried on by the subjects of the Sultan of Muscat from Zanzibar, as well as by the Portuguese from Mozambique, for the supply of various parts of the East.

For further information respecting the slave-trade, we must refer to the works of T. Clarkson, Mr Stephen, Sir T. Fowell Buxton, and others exclusively devoted to the subject. The numerous conventions on the subject between Great Britain and other powers will be found in Mr Hertslet's Collection of Treaties. S. SLIP.

SLIP, a term applied to a place with a gradual slope on the banks of a water, suited for shipbuilding; also to an ingenious apparatus, invented and patented by the late Mr Thomas Morton of Leith, for hauling vessels up to be repaired.

the late Mr Thomas Morton of Leith, for hauling vessels up to be repaired.

Morton's Patent Silp is a cheap substitute for dry docks, where it has not been deemed expedient or practicable to construct them. A vessel, on being placed in it, is in a similar situation to one upon a building silp; and a ship may be handed up, have her bottom inspected, and even get a trifling repair, and be launched, in the same tide. A vessel is hauled up at the rate of \$\frac{1}{2}\$ to 5 feet per minute, by 6 men to every 100 tons. The whole cost of a slip, with an iron capstan-wheel purchase, &c., capable of containing at least two vessels (but exclusive of expense of laying down), as, for those of 100 tons, laying-ways 250 feet long, £400; for those of 900 tons, ways 250 feet, £550; and so on according to dimension. The apparatus is portable, and possesses other advantages, as explained in the Edinburgh Encyclopedia, article \$\frac{Elgo}{2}\$, and Rickman's Life of Telford, pp. 134, 336. Morton slips are now in operation in almost all our principal ports, as well as at Calcutta, Queboc, Marsellies, Odessa, Philadelphia, and other places abroad.

SLOOD a vessel with one meat like a suffice but have been places abroad.

SLOOP, a vessel with one mast, like a cutter, but having a jib-stay.

SMALT (Ger. Schmals), called also axure or powder blue, is a vitreous substance, procured by rossting zaffre and potashes, or by fusing cobalt ore, filnts, and potashes. In either way a blue glass is formed, which is afterwards pulverized. Smalt is employed for relieving the yellow tint of writing-paper and linen, staining glass, porcelain, and earthenware, and for giving a blueish colour to starch.

staining glass, porcelain, and earthenware, and for giving a blueish colour to staron. It is manufactured in Norway and Germany; from whence about 120,000 lbs. are annually imported into the United Kingdom.

SMELT on SPIRLING, a small fish (Osmerus sperlanus, Cuv.) of the salmon kind, plentiful on the E. and W. coasts of Britain; length about seven inches. It ascends the rivers in August, and, after spawning in March or April, returns to the sea. The Medway smelts have a high reputation. The smelt is commonly in great request from its delicacy and flavour: the peculiar cucumber-like smell of this fish is well known.

SMUIGGLING contraband trading or importing goods without naving duty.

SMUGGLING, contraband trading, or importing goods without paying duty. This is a practice which can only be stopped by a moderate tariff. When duties are excessive, experience has shown that an illegal traffic will be created, which no excessive, experience has shown that an illegal traffic will be created, which no power or ingenuity can put down. At present, owing to injudicious fiscal regulations, smuggling is carried on to a greater or less extent in almost all countries. In our own it prevails chiefly in reference to the trade with France, owing to its proximity, and the high duties exacted on many of its productions; and it appears, from the Report of the Import Duties Committee, 1840, that it has been so completely reduced to a system, as to be the subject of regular charges. These, according to Mr Macgregor's evidence, are 9 per cent. upon certain qualities of silk and fine goods; while for 10 and 12 per cent. all but the heavy goods can be insured into this country (p. 13). This report likewise explains that the high protective duty on French goods, while it promotes and encourages smuggling, and consequently interferes with the revenue, does not at all secure employment to the protected manufacturers in this country; for, adds Mr Macgregor, "it is a truism which experience has proved in every country in Europe, that the moment the duty is higher than the premium for smuggling, it ceases to be protective." (Ibid.) The weight of these reasons was felt in framing the tariff of 1842, in which many of the former duties were lowered; and a reduction of the excessive rates still maintained on brandy and some other articles only awaits, we believe, the conclusion of a commercial treaty with France.

But the abolition of smuggling by wise and moderate legislation is desirable on

But the abolition of smuggling by wise and moderate legislation is desirable on higher grounds. The moral influence of the law is impaired when it first tempts to its own violation, and then punishes; for a sympathy is thereby created in favour of the breakers of it. In Spain, into which, from oppressive duties, immense

quantities of merchandise are smuggled by way of Gibraltar and Portugal, no one is more popular or more interesting than the bold contrabandists. Multiplied evils beside flow from the bribery and corruption generated by extravagant duties. On these grounds, there are probably few reforms to which the friends of order in all countries could be more usefully directed than in establishing such fiscal regulations

as should preserve illicit trade at a minimum.

In the United Kingdom, the direct cost of protecting the customs revenue, by means of a preventive guard and cruisers, is about £500,000, which is exclusive of the charges for custom-house officials. A few cruisers are also maintained on account of the excise revenue, besides an expensive revenue police in Ireland. The chief existing act for the suppression of smuggling is 3 & 4 Wm. IV. c. 53.

chief existing act for the suppression of a Vessels and boats belonging in the whole or in part to British subjects, having false bulkheads, false bows, double sides or bottoms, or any secret place adapted for concealing goods, or having any hole, pipe, or other device, adapted for running goods, are forfeited, with all guns, furniture, ammunition, tackie, and apparel; and all foreign vessels or boats, not square-rigged, coming to or arriving at any port of the United Kingdom, having on board goods liable to the payment of duties or prohibited, concealed in false bulkheads, bows, double sides or bottoms, or any secret place, are forfeited, 3 & 4 Wm.IV.c. 23, § 14.

If goods subject to any duty or restriction,

name bulkheads, bown, double sides or bottoms, or any secret places, are forfeited, 3 & 4 Wm. IV.

1. If goods subject to any duty or restriction, or changed the subject to any duty or restriction, or changed the subject to any duty or restriction, or changed the subject to any duty or restriction, or changed the subject to any duty or restriction, or changed the subject to any duty or restriction, or changed the subject to any duty or restriction, or changed the subject to any duty or restriction, or changed the subject to any duty or restriction, or changed the subject to any duty or restriction, or changed the subject to any duty or restriction, or changed the subject to the breacht has 300 tons, or when the length is to the breacht has 300 tons arden, armed with more than 2 mukets for every 10 men, and all beats of such ownership, found within 100 leagues of the coast, are forfeited, unless the owners have obtained a licemse from the Commissioners of Customs (§ 16). But by \$ & 6 Vict. c. 47, § \$ 32 and 33, the provision as to vessels under 300 tons is, where the measurement is made by \$ & 6 Wm. IV. c. & \$6, to apply to vessels under 170 tons.]

Every vessel of such ownership, or whereof one-haif of the crew are British subjects, is restricted in its men (officers and boys included) to the following proportions: via., if of 30 tons or under, and above \$0, 0 men; if of \$0 tons or under, and above \$0, 0 men; if of \$0 tons or under, and above \$0, 0 men; and above that tonnage, I man for every 15 tons additional. In a lugger, the following are the proportions: if of \$0 tons or under, and above \$0, 0 men; if of \$0 tons or under, and above \$0, 0 men; if of \$0 tons or under, and above \$0, 0 men; if of \$0 tons or under, and above \$0, 0 men; if of \$0 tons or under, and above \$0, 0 men; if of \$0 tons or under, and above \$0, 0 men; if of \$0 tons or under, and above \$0, 0 men; if of \$0 tons or under, and above \$0, 0 men; if of \$0 tons or under, and above \$0, 0 men; if of \$0 tons or under, and above \$0, 0 men; if of \$0 t

muggling is 3 & 4 Wm. IV. c. 53.

navigation, and in fishing on the coasts of the North and West Highlands of Sociand, and of Ireland, are not included in the above provisions (§ 23). [By 6 & 7 Wm. IV. c. 60, § 8] kneases are not required for vessels solely engaged in fishing on the coasts of Sookland.]

If goods liable to the payment of duties be unshipped from any vessel or boat (the duties not being first paid or sesured), or if any prohibited goods be imported, or if any goods, warehoused in the United Kingdom, for home consumption or exportation, be clandestinely removed, all such goods are forfsited, together with all cattle, carriages, and other things, used in the removal (3 & 4 Wm. IV. c. 53, § 89). Persons making collusive selsures, or making arrangements to restore goods seized, or taking bribes, forfsit £500 for each offence, and are rendered incapable of serving in any government-office, civil or military; and any person attempting to seduce them to any such dareliction of duty, forfsits £900 (§ 33).

Every person concerned in the unshipping of probibited or uncattaged goods are knowledged.

with the alkalies sods or potash; the union of sods forming hard, and of potash with the alkalies sous or potasn; the union or sous forming nara, and or potasn soft soap. Of the former, the principal qualities manufactured in Britain are,—
white soap, composed chiefly of tallow and sods, but, for some purposes, of cliveoil and sods; yellow soap, made of tallow, rosin, and sods, adding occasionally a
little palm-oil; motifed soap, formed of tallow, kitchen stuff, and sods,—its peculiar appearance being communicated by dispersing the less through it towards the
end of the operation; brown soap, made from palm-oil, rosin, and sods. Soft soap
consists usually of potash and oil; the latter being generally fish oil, but occasionally linseed oil and occoa-nut oil. Besides the above, there are a variety of toilet
soans hard as well as soft in the preparation of which perfumes and other ingrescaps, hard as well as soft, in the preparation of which perfumes and other ingre-

sionally linseed oil and occos—nut oil. Besides the above, there are a variety of toilet soaps, hard as well as soft, in the preparation of which perfumes and other ingredients are employed.

In Britain, where the soap manufacture is of great importance, the hard kind is made chiefly at Liverpool and London, but in considerable quantities also at Runcorn, Britatol, Brentford, Rull, Bromsgrove, Plymouth, and Smethwick, and at Glasgow and Leith in Scotland; the soft kind is made principally at Liverpool, Glasgow, and Bradford; and a kind called silicated soap is likewise extensively manufactured at Liverpool. From the excise returns, it appears that there were made, in 1841, in England, 140,712,535 lbs. bard, 9,783,851 lbs. soft, and 3,921,867 lbs.; which is an increase of about 50 per cent. alnce 1852. An allowance or drawback of duty is made on the soap used in the woollen, silk, flax, and cotton manufactures, which, in 1841, was granted on 10,190,189 lbs. bard, and 9,099,184 lbs. soft; the allowances amounting to £78,112. In the same year, the net amount yielded by the soap-duty to the public revenue was £815,864.

In Ireland, where soap is not subject to excise-duty, the manufacture is carried on chiefly at Belfast, Londonderry, Limerick, and Cork; but the quantity made is insufficient for the consumption; and, in 1841, 9,188,769 lbs. hard, and 294,788 lbs. soft, were imported from Britain, the duty on which was drawn back on abipment. The exemption of Ireland from duty leads to fraudulent practices both there and in Britain, into which Irish soap is said to be largely sumagied.

The excise duty on soap was first imposed in Britain in 1711, when it was fixed at 14, per lb. It was raised in 1713 to 14d, per lb.; and again, in 1783, when hard and soft soap were first disquished, the former being rated at 12d, and the lister at 12d, per lb. In 1916, that on hard soap, and 1d, per lb. on soft. In 1839, the number of soap manufacturers in England was 177; in Scotland, 19; and in Ireland, 183. Each requires an annu

and the importation in future will probably be more considerable. S SODA (Fr. Hydrate de soude. Ger. Aetsnatron), an alkaline substance, the protoxide of sodium of chemists, is found native in mineral seams or crusts in Egypt, in which it is called natron; but in this country it is commonly obtained pure by boiling a solution of the carbonate with half its weight of quick-lime. In its original state it is of a gray colour, fracture vitreous; but by the addition of water it becomes white, crystalline, and volatile, and is then the substance commonly called pure or caustic soda, but more properly the hydrate. Soda is very seldom used in a separate state. In commerce it generally occurs as a carbonate, either pure, or in the impure forms of Raffulla and Kelp.

used in a separate state. In commerce it generally occurs as a carbonate, either pure, or in the impure forms of Barilla and Kelp.

Soda, Carbonate or (Ger. Kohlensuves eastron), commonly called soda, is found native near Tripoil, from whence it is exported under the name of trona; also in soda lakes in Hungary and venesuels. But the British market is wholly supplied with carbonate, either in the impure forms of barilla and kelp, as just noticed, or, as has been chiefly the case since the reduction of the salt-duty, by that prepared from the sulphate of soda. The latter is now largely manufactured at a very cheap rate, and of extreme purity; and life Brande states, that in many of the arts it has been substituted for potash. Carbonate of soda is strongly alkaline in taste, and it changes vegetable bines to green. It is soluble in less than its weight of boiling water, and twice its weight of cold. When exposed to the air it effloresces.

Soda, Sulpharz or, called also Glusber's salt, is abundantly produced in the manufacture of muriatic acid, and of chlorine by the action of sulphuric acid upon common salt. Large supplies are furnished by the manufacturers of bleaching-powder. It is also a natural product, and occurs in many mineral waters. Bulphate of soda crystallizes from its aqueous solution in large prisms, transparent, and efforecount when exposed to air; its taste is saline and somewhat bitter; and it is soluble in rather less than three times its weight of cold water. It is often made expressly for the production of soda and the carbonate.

The carbonate of soda is an article of the greatest importance in the soap, glass, and other ma-

The carbonate of sods is an article of the greatest importance in the scap, glass, and other manufactures. Both it and the sulphate are likewise employed in medicine. They are extensively manufactured in the United Kingdom; and besides the demand for home consumption, considerable quantities are sent to the United States and other places. 3

SOLE, a species of flounder (Solea vulgaris), common on the British coasts: those of the S. and W. are much larger, and considered otherwise superior to those

of the N. and E. The principal fisking ground is along the S. coast from Sussex to Devonshire, particularly at Brixham and Torbay. Soles are in season from May till November.

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SOUND, a strait between Sweden and the Danish island of Zealand, which forms the principal channel of communication betwirt the North Sea and the Baltic. A toll or tribute, called the "Sound dues," is levied by the King of Denmark on all merchant-vessels passing this strait, or the two Belts, at the town of Elsineur, situated on the W. side of the narrowest part of the Sound, about 20 miles N. from Copenhagen, and at which they are required to anchor while effecting a clearance. The dues are levied on both foreign and Danish vessels, according to a fixed tariff. It is adjusted chiefly according to the quantities of the goods; and amounted formerly to from 3-ths to I and 1-4th per cent. on their value; but by a treaty between Great Britain and Denmark, concluded in 1841, a new tariff has been agreed to, in which there are several important modifications, and the dues on the cargoes of British vessels (even when shipped at ports not British) may be now reckoned at about 1 per cent. ad velores, which indeed is the rate fixed for cotton manufactures, spices, and non-enumerated articles. Basides the Sound toll, there are levied light dues, at the rate of 4 specie dollars per vessel (above 46 tons) when laden, and 2; store; reckoning the specie rixdollars at the rate of 9 to the Cologne mark weight of fine silver, which makes its value about 4s. 64 sterling. It is, however, understood that the notes issued by the Danish National Bank are to be received in payment at the current exchange.

The dues, though levied for the ostensible purpose of maintaining lighthouses on the coast, appear to have originated in an ancient claim by the Danes to the exclusive privilege of navigating the Baltic, as the Genoese did the Black Sea. They have been the origin of many quarreis, and cost more money than, if sunk at a very low interest, would have produced a

Capricorn. Area, 300,000 sq. miles. Public affairs are administered by a governor appointed by the crown, but a local constitution may be framed when the population shall amount to 50,000. S

The coast of this part of Australia, discovered by Flinders in 1802, was first regularly settled in 1835, when the capital, Adelside, was founded in lat. 34° 57° B., long. 138° 43° B. to the B. of Guif St Vincent, and distant 6 miles from a creek affording good accommodation for ahipping. Little is known regarding the interior, which, however, appears generally to resemble Naw Sourne Walls, in being adapted rather for pasture than for cultivation. By the act of constitution, it is to be governed only by laws expressly enacted for it; is in no case to be employed as a convict settlement; and no public lands to become private property, except by purchase at a fixed minimum price, or as much above it as may be determined by anction. "The whole of the purchasemoney of waste or public land to be employed in conveying labourers, natives of the British isles, to the colony." And the disposal of public lands and management of the emigration fund, was vested in crown commissioners. An extensive joint-stock concern, called "The Bouth Australian Company," was afterwards formed, having for its objects the purchase of land and the promotion of emigration; and who grant leases to experienced farmers.

The usual course of trade is similar to that at the Port Phillip settlement. In the five years 1836-1840, 137 vessels, having an aggregate burden of 63,481 tons, and carrying 12,370 emigrants, were deepstached from the United Kingdom to this colony.

SOUTH SEA COMPANY, an association formed in London in 1711, avowedly

were despatened from the United Aington to this colony.

SOUTH SEA COMPANY, an association formed in London in 1711, avowedly to trade in the South Seas, but chiefly in reality to afford financial aid to the government, whose obligations they received as capital stock. The amount thus sreated was £9,471,825, increased in 1715 to £10,000,000, on which the company teceived 6 per cent. interest, besides £3000 a-year for management. In 1720 was passed the celebrated South Sea Act, authorizing the company to take in by purchase or subscription both the redeemable and unredeemable public debts, with the view of reducing them all under one head of account at a uniform interest. A full account of the South Sea Bubble, and of the numerous projects generated by the speculative phrensy which prevailed in England in 1720, will be found in

M'Pherson's Annals of Commerce, vol. iii. p. 90. It may be sufficient to notice here, that the stock of the company, after many changes before 1733, was then adjusted, and has since remained, at £3,662,784, 8s. 64d. [Funds.] SOVEREIGN, an English gold coin first minted by Henry VII., 1485. Its value varied at different times; and in 1666 it was superseded by the guines. The sovereign was again struck in 1816, since which it has been the principal gold piece of the United Kingdom. It is minted 22 carats fine, and at the rate of £3, 17s. 10\frac{1}{2}d. per troy ounce; hence its full weight is 5 dwts. 3°274 grains; but the sovereign of 5 dwts. 2\frac{1}{2} grains, and the half-sovereign of 2 dwts. 13\frac{1}{2} grains, are allowed currency by royal proclamation, June 7, 1842. [Coin.]

SOY, a peculiar savoury sauce made from the bean of the Soja, a species of Doliohos growing in the eastern parts of Asia. Genuine soy is well flavoured, thick, brown, and clear; and when shaken in a glass, it should leave a coat on the surface of a bright yellowish brown colour. It is imported from Canton, but the best is brought from Japan by way of Batsvia.

surface of a bright yellowish brown colour. It is imported from Canton, but the best is brought from Japan by way of Batavia.

SPAIN, a European kingdom lying between lat. 36° and 43° 46′ N., and long. 3° 20′ E. and 9° 10′ W.; bounded N. by Bay of Biscay and France; W. by Portugal and the Atlantic; and S. and E. by the Straits of Gibraltar and the Mediterranean. Area, 183,000 so, miles. Population, 12,500,000. Capital, Madrid, an inland city, pop. 183,000. Government, a constitutional monarchy: the legislative power is vested in the king (or queen) and the cortes composed of two co-legislative bodies,—a senate nominated by the sovereign from a triple list proposed by the provincial electors, and a congress of deputies chosen by the provinces at the rate of 1 for each 50,000 of the population. The elections are triennial; one-third only of the senators, however, going out at each period. 8

each 50,000 of the population. The elections are triennial; one-third only of the senators, however, going out at each period. 8

Spain, next to Switzerland, is the most mountainous country in Europe. The lofty Pyrenees forming its N.E. barrier, are continued through the N., where they receive the name of the Cantarian chain, running parallel to the Bay of Biscay, and terminating in Cape Finisterre. The remainder of the country may be considered generally as a series of mountain-terraces, which projecting successively their rugged edges towards the S. present a flight of gigantic steps from the Fyrenean range to the Mediterranean. But the central portion, comprising the greater part of the provinces of Old Castile, New Castile, Leon, and Estremadura, is an elevated table-land, averaging from 3000 to 3000 feet above the level of the sea. The singular configuration of Spain renders its climate various. In the low grounds, the heat during summer is excessive; in the elevated regions the temperature is cooler; and the interior is subject to piercing winds, which prevent the production of many fruits that thrive in the more northern latitudes of Italy.

The chief rivers of Spain are the Ebro, Douro, Tagus, Guadalquivir, and Guadiana, some of which run several hundred miles, but owing to the artidity of the table-land, and the adjoining iracts, in which they aimost all rise, they contain little water; they are besides impeded by rocks, shallows, and cataracts; and only a very few are navigable for small boats, and that commonly meant their mouths. But though nearly useless for the purpose of inland communication, they are of importances for the irrigation of the ground,—a practice nearly general in the countries bordering the Mediterranean, and in the basin of the Guadaquivir. In the table-lands, irrigation cannot be introduced, owing to the depth of the river course; and in the N. and N.W. maritime provinces it is unnecessary, from the abundance of the rains.

The soil is in general fertile, especially where irrigat

the first, all of inferior quality. Biscay is celebrated for its iron-works; and the N. provinces generally for their tameries. The only other manufactures of any consequence are those of soap, paper, hats, linen, and pottery. Saltpetre, gunpowder, brass-cannon, tobacco, porcelain, tapestry, and mirrors, are made catualvely by government.

When, the great staple of Spain, is produced chiefly in the S. provinces, especially Andalusia, the control of the

nongo, saves, creese, bess-war, norns, and specie. Exports, sink, ricanas, inces, paper, nats, soap, fivearms, and steel.

Alicant lies in Valencia, on the Mediterranean, in lat. 38° 21' N., long. 0° 27' W. Pop. 14 °CO.

Its pier is accessible only for small craft; large vessels anchor outside. Exports, wine, brandy, almonds, barilla, olives and olive-oil, figs and other fruit, salt, wool, esparto-rush, silk, &c. Imports, colonial produce, timber, salted fish, linens, cottons, &c.

Malaga is situated in Granada, on the Mediterranean, 63 miles N.E. of Gibraltar, in lat. 38° 43' N., and long. 4° 25' W. Pop. 52,000. It possesses an excellent harbour. Exports, chiefly wines, raisins, almonds, graps, figs, and lemons; with lead, olive-oil, brandy, anchovies, barilla, soap, &c. Imports, iron, salt-fish, butter and cheese, wooltens, colonial produce, &c.

Bilbox, the ancient capital of Biscay, and chief port in the N. of Spain, lies in lat. 43° 12' N., long. 2° 56' W., on the Nervion, about 10 miles above tis confluence with the sea at Portugalete, where, or at Olaviaga, 6 miles above, large vessels usually stop. Exports, principally iron and steel, wool, fruits, corn, and fish. Imports, chiefly colonial produce, cottons and woollens. Polma, the capital and commercial emporium of the island of Majorca, lies in a bay on its S. side, in lat. 39° 34' N., long. 2° 38' E. It trades chiefly with Spain, France, and England. Exports, olive-oil, wine, brandy, oranges, and other fruits, capers, saffron, and mules. Imports, wheat, iron, hardware, provisions, and manufactured goods.

Massurges. Weights. Mongy. Finances. &c.

MEASURES, WEIGHTS, MONEY, PINANCES, &c.

MEASURES AND WEIGHTS.

The (Burgos) foot of 12 pulgados or 16 dedos, = 11-128 Imp. inches; the vars, or Castile eller, it the estada, or fathom, is 6 feet; the cuerda is 33 palmos do 10 varse = 92.73 Imp. yards; the coton foot or seed to the vars, is 100 varse = 92.73 Imp. yards; the coton foot or seed to the vars, is 100 varse = 100 varse

The arançada of vineyard land = 5377; square varas = 3 Imp. roods, 38 poles nearly; the fanegade of corn land is in general about 6000 square varas, or 1 Imp. acre, 104 poles nearly; the yugada is 50 fanegadas; and the cabisada is vague measure of land, on which a cabis of corn may be sown

a vague measure of land, on which a cahis of corn may be sown.

The cantara, or greater arroba, whe measure, of 8 asumbres, or 32 quartillos, = 3:54 Imp. gallons; and 16 wine arrobas = 1 moyo = 55°64 Imp. gallons. The leaser arroba, oil measure, of 4 quartillos, or 100 quarteroues, = 2:77 Imp. gallons. The botts = 30 wine arrobas = 39; oil arrobas; the pipe = 27 wine arrobas = 39; all arrobas = 94; imp. gallons.

The fanges, corn measure, of 12 celemines, or 48 quartillos, = 1:35 Imp. bushel; and 100 fanges = 19; Imp. bushels.

The pound of 2 Gastillan marks, 16 ounces, 128 drachms, or 9216 grains, = 7101 troy grains; the arroba of 25 bs. = 25:36 ibs. avoirdupois; and the quintal of 4 arrobas, or 100 lbs., = 101·44 lbs. avoirdupois.

The apothecaries' weight is the same as the above; their ounce, however, is divided into 8 drachms, 48 scruples, 48 obolos, 144 caracteres, or 5:6 grains.

The gold and allver weight is the Castilian The apoth and allver weight is the Castilian The apoth and allver weight is the Castilian The apoth and allver weight is the Castilian The apoth and allver weight is the Castilian The apoth and allver weight is the Castilian The castilian The apoth and allver weight is the Castilian The castilian The Castilian The castilian The castilian The castilian The castilian The castilian The castilian The castilian The castilian The ca

The gold and silver weight is the Castilian mark = 350½ troy grains; in weighing gold it is divided into 50 castellanos, 400 tomines, or 4800 grains; and in weighing silver into 8 ounces, 64 ochavos, 128 adarmes, 384 tomines, or 4608 grains. The fineness of gold is expressed by dividing the mark or other unit of reference into 24 carats, each of 4 grains; the fineness of silver, by dividing it into 12 dineros, each of 24 grains. The diamond ounce of 140 carats, or 560 Castilian grains, = 4313 troy grains nearly. or 576 grains.

The real of vellon, the most common coin in Spain, consists of a base mixture of silver and copper, and is worth 2]d. sterling. The real of plate, or more properly of old plate (plate andigue), a nominal standard used only in accounts and exchanges, is estimated according to an old silver coinage, and is worth 4]d. sterling. There are a variety of other reals, but when the term real is used alone, the real of vellon is always to be understood as always denoting old plate.

In Alicant and all Valencia, accounts are kept in dollars of plate, or libras, divided into 20 sueldos, each of 12 dineros. In Barcelons and all Catalonia, the libra of account is similarly divided; but 3 dollars of plate are reckoned equal to 7 Catalonian libras.

The accounts of the public finances are stated in escudos vellon, each of 10 reals vellon. The secudo vellon = \$2. id. sterling.

Coins: In gold; the quadruple pistole, or doubloon of 6 secudos d'oro, = 300 reals vellon, or 16 hard dollars; the doubloon of 4 escudos = 160 reals vellon; the coronlia or gold dollar = 20 reals vellon; the coronlia or gold dollar = 20 reals vellon; the half-dollar or gold dollar = 20 reals vellon; the half-dollar or petento vellon = 20 reals vellon; the provincial peseta; the ½ dollar, or real of Provincial plate; the ½ dollar, or half real of Mexican plate; the ½ dollar, or real of Provincial plate; the ½ dollar, or real vellon; quartos; ochavos, or new maravedis of plate; maravedis of vellon.

Since 1786, the Castillan mark weight of gold, 21 carats fine, has been coined into 8½ doubloons of 8 escudos, 17 doubloons of 4 escudos, 34 common doubloons, or 63 escudos. The same weight of silver, since 1772, has been coined into 8½ and real of 186; the Castillan mark weight of gold, 31 carats fine, has been coined into 8½ doubloons of 8 escudos, 17 doubloons of 6 escudos, 34 common doubloons, or 63 escudos. The same weight of almore, and half-dollars being 103 diherers, and byt dollar, or each of being secusion plate; in the weight, and ½ tho f a caract in

The diamond ounce of 140 carate, or 80 Castilian grains, = 431\$ troy grains nearly.

The preceding are the Castilian standards, which are the general or official standards of Spain. But the local variations are numerous; the chief are the following:—

Alcant.—100 varas = 85-92 Imp. yards. The tonelads, of 2 pipes, 80 arrobas, or 100 caraters, = 254\$ Imp. gallons. The caffise, = 66 Imp. bushels. The arroba of 34 great pounds, or 135 maravedis value, when of full weight, and \(\frac{1}{2} \) the caffise, = 753 Imp. bushels is the carga of 10 arrobas.

Barcelona.—The cana of 2 varas = 37-92 Imp. inches. The carage of 10 arrobas. The caffise, = 753 Imp. bushels is the carga of 4 quarters. The arroba of 35 grains per mark in the weight, and \(\frac{1}{2} \) the carga of corn is 3\(\frac{2}{2} \) quarters. The arroba of 25 pounds, each of 12 ounces, = 21-37 lbs. avoirdupois; 4 arrobas = 1 quintal.

Bilbao.—The fanega, corn measure, = 1-65 Imp. bushels. The quintal macho, used in weighing from, consists of 146 lbs, equal 1977 lbs. avoirdupois; but the quintal macho, used in weighing from, consists of 146 lbs, equal 1977 lbs. avoirdupois; 4 arrobas. The carga of of ill contains 35 cantaras, but its reckoned at only 34, or 1184 Imp. gallons. The bots of oil contains 45 cantaras, but its reckoned at only 34, or 1184 Imp. gallons. The bots of oil contains 45 cantaras, but its reckoned at only 34, or 1184 Imp. gallons. The bots of oil contains 45 cantaras, but its reckoned at only 34, or 1184 Imp. gallons. The carga of raisins weights of the hard collar. Alfore years are 35 Castilian arrobas. The carga of raisins weights of the large of plate = 15 arrobas; the carga of oil = 12 arrobas. The cathix, = 5-55 Imp. bushels arrobas. The cathix, = 5-56 Imp. bushels arrobas. The cathix, = 5-56 Imp. bushels arrobas. The cathix, = 5-56 Imp. bushels arrobas. The cathix, = 5-56 Imp. bushels arrobas. The cathix, = 5-56 Imp. bushels arrobas. The cathix, = 5-56 Imp. bushels arrobas. The cathix, = 5-56 Imp. bushels arrobas. The cathix

ommittee of the English creditors, was as for extensive circulation of inland bills of exchange, through the medium of the higher class of merchants, who all call themselves bankers, and who all call themselves bankers, and who all call themselves bankers, and who have agents and connexions in the different towns to facilitate their operations.

The finances of Spain are in such confusion that we are unable to furnish any precise account of their present condition. In the budget for 1839, the revenue was tated at reals 715,096,638 = £7,448,925; but it may be doubted if this sum was realized; and, at all events, it was greatly exceeded by the expenditure.

The debt in 1840, according to the report of a SPECIE, metallic currency.

The debt in 1840, according to the report of a increase a concessor at a local SPECIE, metallic currency.

SPECULATION is, according to political economists, every transaction in which an individual buys in order to sell again; but among commercial men, the term is more loosely applied to incurring extensive hazards in the hope of corresponding emolument; in short, to whatever is foreign to the proper business of the individual, or beyond the control of common rules. [PRICE.]

SDETTER a common name for ZINC.

or beyond the control of common rules. [PRICE.]

SPELTER, a common name for ZINC.

SPERMACETI (Fr. Blanc de baleine. Ger. Wallrath. It. Bianco di balena),
the product of the Physeter macrocephakus, a species of whale found chiefly in the
South Seas. This whale is characterized by an enormous head, great part of which
is occupied by a triangular cavity filled with a white fluid oily substance, which,
after its death, congeals into an unctuous mass, from which a considerable quantity
of oil may be obtained by expression. The residuum is a concrete fatty substance
called spermaceti, which is generally imported in a crude state; after being purified,
it is cast into blocks or cakes. These are of a white colour, have a peculiar lustre,
are transparent, brittle, smooth, but not greasy; smell peculiar, but weak. Sp.
gr. 948. Spermaceti burns with a brilliant flame, without smell, and is used in the
manufacture of candles; also for medical purposes. manufacture of candles; also for medical purposes

manuracture of candles; also for medical purposes.

Spermaceti oil is more pure, and burns more perfectly and brilliantly than common whale oil; and it is accordingly much used for the finer kinds of lamps.

SPIGELIA, or CAROLINA PINK, a perennial, herbaceous, medicinal plant (S. Marylandica), indigenous in the S. states of the N. American Union. The part chiefly valued is the root, which, in its newly dried state, is celebrated as anthelminthic. It is purchased by the Americans from the Creek and Cherokee Indians, but loging power by keeping, little is carried to Europe.

chiefly valued is the root, which, in its newly dried state, is celebrated as anthelminthic. It is purchased by the Americans from the Creek and Cherokee Indians,
but, losing power by keeping, little is carried to Europe.

SPINEL, an ornamental stone which occurs crystallized either in regular octahedrons, or in macles presenting different forms. It is of various shades of red,
violet, or yellow, more rarely black. Sp. gr. 3.5. By lapidaries, the scarlet-coloured
is termed spinel ruby; the rose-red, balas ruby; the yellow or orange red, the
rubicelle; and the violet-coloured, almandine ruby. The first is the most valuable.
Spinel is not so hard as the oriental ruby, and is readily distinguished, both by its
colour and crystallization. It is principally found in Ceylon and the Malay peninsula. The pale, blue, and pearl-gray varieties are found in Sweden.

SPIRITS, distilled liquors, modifications of Alcohol, which differ from each
other in taste and flavour, and some of them in colour, though this last difference
is adventitious, as, when first prepared, they are all limpid and colourless, and acquire the peculiar tint by which they are ultimately distinguished from the casks
in which they are kept, or from some colouring substance added during their preparation. They derive their taste and flavour from particular essential cils with
which they are impregnated, and which differ according to the substances that
furnish each spirit or are employed in the manufacture. Commercially, they are
classed as Foreign and Colonial, and British, and for fiscal purposes, the former are
subjected to the customs, the latter to the excise department of the public revenue.

FOREIGN AND COLONIAL SPIRITS consist of brandy, procured from wine; rum,
from the fermented juice of the sugar-cane; and geneva, made chiefly from rye;
a particular account of which will be found under these respective heads. Other
spirituous liquors are prepared abroad; but, with the exception perhaps of Indian arrack, usually manufactured from ri

dian arrack, usually manufactured from rice, they are unimportant and little

known beyond the countries of production.

BRITISH SPIRITS are made principally from barley, employed either in the state of grain or malt, according to the kind desired. In Scotland and Ireland, where spirits are the national beverage, the liquor is preferred in its pure and simple state [Whisky], and it is supplied to the retailers directly from the distilleries,

which are very numerous. In England, on the other hand, beer is the general drink of the people; while spirits, the use of which is confined chiefly to large towns, are not considered palatable until compounded with and disguised by the addition of other ingredients [Gin], and hence the rectifier has been constituted the individual who furnishes the spirits for retail,—leaving distillation a kind of monopoly in the hands of a comparatively small number of persons. Repeated attempts have been made, by the imposition of high duties and otherwise, to diminish the consumption of a spirits; but in no instance with success. Whenever

kind of monopoly in the hands of a comparatively small number of persons. Repeated attempts have been made, by the imposition of high duties and otherwise, to diminish the consumption of spirits; but in no instance with success. Whenever the tax is carried beyond certain moderate limits, it gives rise to illicit distillation; and without in any degree lessening the evils of drunkenness, produces other kinds of demoralization, bringing the law into contempt, and enabling those who despise its enactments to undersell the fair trader.

The Spirit Duties are the most important of all under charge of the excise; both with respect to the amount of revenue received, and to the extent of official employment which they impose.

In England, spirits were first subjected to the excise in 1660. After various futuations, the duty stood in 1790 (reckoned in Imperial) at 3s. 48d, per gallon; at which it continued until 1819, when it was brought up to the maximum rate of 15s. 7d, per gallon. This high duty remained until 1826, when, in consequence of the extisfactory result of a great diminution in the duty in Scotland and Ireland in 1833, it was reduced to 7s. a-gallon. The effect of this alteration was an increase in the quantity brought to charge from 5.65.232 gallons in 1835, to 7,007,204 gallons in 1826. In 1830, the rate was raised to 7s. 6d. a-gallon.

In Scotland and Ireland, the duties, after various changes, were reduced, the former from 6s. 2d., the latter from 5s. 7d. to 2s. 10d. and, in 1830, to 3s. 4d. per gallon. In 1834, the Irish duty was lowered to 2s. 4d; but it was again made equal to the Scotlish in 1649 (5 Vict. c. 15).

The act 3 Vict. c. 17, added 4d. per gallon to the duties after May 15, 1840; thus making the rates 7s. 10d. in England, and 3s. 8d. in Scotland and Ireland; which duties are reckoned on spirits of hydrometer proof. On the malt used by distillers, a drawback is allowed of 8d. per gall. The consumption of spirits in the United Kingdom, 26,729,004 gallons in 1831, increased in 1836 to 31,346

Total Number of Proof Gallons of Spirits that paid Duty in 1831 and 1841.

	1831.				1841.			
	Rum.	Brandy,	British Spirite.	Total.	Rum.	Brandy,	British Spirits.	Total
England, <i>galls.</i> Scotland, do. Ireland, do.	125,702	38,994	5,700,689	12,123,754 5,865,385 8,739,865	48,523	40,291	5,989,905	
United King- dom,do.	3,624,597	1,258,999	21,845,408	26,729,004	2,277,970	1,186,104	20,660,847	24,194,991
Net Duty, £	1,629,881	1,415,061	5,189,661	8,234,603	1,063,067	1,354,679	5,168,862	7,586,028

The number of gallons distilled in 1841 were as follows:—In England, 5,919,207; Sotland, 8,514,333; Ireland, 6,369,124; total, 20,782,654. Imported into England—from Scotland, 1,894,657 gallons, from Ireland, 30,235 gallons. Signature of the second from Scotland, 809,235 gallons. Signature of the second from Scotland, 1,894,657 gallons.

SPONGE (Fr. Eponge. Ger. Schwamm. It. Spugna. Arab. Isfenj), a light, porous, elastic, brownish yellow substance, procured by divers, chiefly in the Greek Archipelago and Red Sea, and of an inferior description in the West Indies. It is Archipeiago and ited Sea, and of an interior description in the west indies. It is now ascertained to be a species of zoophyte. It grows into irregular tubes of a woolly consistence, and generally adheres by a broad base to rocks submersed in the ocean. When first taken, it has a strong fishy smell, and requires to be carefully washed from a gelatinous slime which covers its surface, in order to prevent its growing putrid. Sponges are prepared for use by washing them anew and beating them free of all stony matter, and they are even bleached to deprive them of colour. Their price varies exceedingly, according to the fineness of their texture. They are used for domestic purposes, in the arts, and in surgery.

of colour. Their price varies exceedingly, according to the fineness of their texture. They are used for domestic purposes, in the arts, and in surgery. Some SPRAT, a small fish (Clupea spratus), resembling a young herring, found in large shoals on the Norfolk, Suffolk, Kent, and Essex coasts. It is also taken in the Forth, near Edinburgh, where it is called the garvis herring, and on the eastern coast of Ireland. Sprats are in season from November to March, when an abundant supply is always to be obtained at Billingsgate. Within the last few years they have been extensively used as a manure. The fishing for this purpose, called the stow bent fishery, is chiefly prosecuted on the Kentish coast.

SQUILL (Fr. Scille. Ger. Meerswiebel. It. Soilla, Cipolla marina. Sp.

Cebols alberrans), or sea-onion, is a perennial bulbous-rooted plant (Scilla marisma), found on the shores of Spain, Portugal, North of Africa, and the Levant. The bulbs are pear-shaped, and vary in size from that of the fist to the compass of a child's head. They are the only part used, and should be chosen plump, fresh, sound,

balls are pear-shaped, and vary in size from that of the fist to the compass of a child's head. They are the only part used, and should be chosen plump, fresh, sound, fall of a clammy juice, nanseous, acrid, and bitter, and causing inflammation when rubbed on the skin. In the shops, squill is commonly met with in the form of the dried shreds of the root. It is used medicinally, chiefly as an expectorant. STADE TOLL. (HAMBURG.)

STAMPS, impressions made upon paper or parchment by government for the purposes of revenue. They always denote the tax levied, and sometimes the nature of the instrument stamped. Stamp-duties were first imposed in Holland, 1624; and they not long afterwards became general in Europe; there being, as Adam Smith remarks, "no art which one government sconer learns of another, than that of draining money from the pockets of the people." They were introduced into England in a temporary form in 1671; and having been revised in 1693 (5 Wm. & M. c. 21), were in time extended, so that besides crown grants, diplomas, probates of wills, and law and other formal proceedings, every instrument recording a transaction between two individuals was subjected to a stamp-duty before it could be used in a court of justice. Newspapers and legacies [Succession Dornes] were also brought under the same system. Stamps were likewise adopted as a convenient method of impecing a duty upon particular classes of persons, as physicians, barristers, and attorneys, who are taxed before they can begin practice, under the form of an admission-stamp; and notaries, solicitors, bankers, pawn-brokers, and appraisers, who are not qualified to exercise their callings without a yearly license. The stamp acts, voluminous in number and extent, were consolidated in 1815 by 55 Geo. III. c. 184, a schedule annexed to which exhibits the whole duties exigible in Britain. They have been since mitigated, particularly by 5 Geo. IV. c. 41, which exempts law proceedings from stamps. In 1842, the stampduties in Ireland, formerly lower than tho

TABLE OF PRINCIPAL

BILLS AND PROMISSORY NOTES. Inland.

Not exceeding two months after date, or sixty days after eight.					ried.
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BRA.—Coasting Voyage.
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Premium above 20s. per cent.
If sum not above £100 9 6
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Foreign Voyage.
Premium not above 15s. per cent.
If sum not above £100
Every £100, and part of £100
Premium above 15s. and not above 80s.
per cent.
If sum not above £100 2 6
Every £100, and part of £100
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complete sum of £1. of purchase money See SUPPLEMENT.

The stamp laws, in reference to mercantile writings, are explained under BILLS OF EXCHANGE, POLICY, RECEIPT, and other heads. Farther information will be found in Chitty's Practical Treatise on the Stamp-Laws

STAPLE, originally a public market whither traders were obliged to carry

their goods for sale; but now applied to the chief productions of a country.

STARCH (Fr. Amidon. Ger. Amidom), a substance found in a variety of vegetables, but procured generally from wheat flour or potatoes. The greater part of the common or wheat starch employed in this country is made in or near London. the common or wheat starch employed in this country is made in or near London. Potato starch is made chiefly in districts where potatoes are cheap and abundant, more particularly in Scotland. The process for obtaining it, in both cases, consists in diffusing the powdered or bruised grain or seed, or the rasped root or stem, in cold water, which becomes white and turbid; the grosser parts may be separated by a strainer, and the milky liquor that passes deposits the starch, which is to be washed in cold water and dried in a gentle heat. 100 lbs. of wheat produce about 33 lbs. starch; and 100 parts of skinned potato from 15 to 17 parts of starch. The best kind is white, soft, and friable, and easily reduced to powder. Sp. gr. about 1°5. It is insoluble in cold water and alcohol, but readily affords a gelatinous solution in warm water, which is largely employed for stiffening articles of wearing apparel, and for dressing some descriptions of goods after weaving. It is also much employed by the calico-printer. Potato starch is said to be much more susceptible of moisture than wheat starch, and goods which are stiffened with it are apt to yield in damp weather, and to become mouldy if laid by. A duty of \$\frac{1}{2}\text{d}. per 1b. was formerly levied in Britain on starch, but it was abolished in 1834, at which time the annual consumption was about 8,700,000 lbs. time the annual consumption was about 8,700,000 lbs. g

stead the annual consumption was about 8,700,000 lbs. S
STEAM-ENGINE, a piece of mechanism by which the force arising from the properties of elasticity and of instantaneous condensation, possessed by steam, is either employed to produce a continuous rotatory motion (with a fly-wheel which constitutes a reservoir of power) for the purpose of driving machinery, or for any other use that power may be put to. In common with most other important applications of physical principles, no individual can lay claim to its invention; but its germ is to be found in the steam-pumps of the Marquis of Worcester (1663) and Captain Savery (1698); and in a more advanced state in the "atmospheric engine" of Newcomen (1705), also employed for pumping water only, but which, by the genius of James Watt (b. 1736, d. 1819), was eventually converted into the modern steam-engine. [Machiner.] S
STEAM NAVIGATION was attempted by various individuals in the course of the 18th century; but the experiments which tended more than any other to

of the 18th century; but the experiments which tended more than any other to develop this application of steam were the joint labour of three Scotsmen—Patrick Miller of Dalswinton, Dumfriesshire, James Taylor, his son's tutor, and William Miller of Dalswinton, Dumfriesshire, James Taylor, his son's tutor, and William Symington, mining-engineer,—Miller preparing the proper vessel and propelling apparatus, Taylor recommending the steam-engine as the working-agent, and Symington effecting the modifications necessary in its structure. This took place between 1786 and 1789; and in 1802 a steam-tug, made by Symington, with a single paddle-wheel in the stern, was placed on the Forth and Clyde Canal; but the project was abandoned through fear that the undulation produced by it would now in the project to the banks. Symington's apparatus, though they neededed in project was abandoned through fear that the undulated produced by two-prove injurious to the banks. Symington's apparatus, though them neglected in this country, had been seen and examined by many, and especially by Robert Fulton, an American, then studying painting under West; and who, with less merit as an inventor than Symington, but with more ample resources and greater

energy, succeeded, in conjunction with Chancellor Livingstone, in introducing steam navigation into the United States in 1807, when the Clermont of 160 tons was launched at New York. Four years afterwards, it was successfully established in this country by Henry Bell, an enterprising house-carpenter of Glasgow, who in 1811 started the Comet, of 25 tons burden and 3 horse power, to ply to a bath hotel which he had set up at Helensburgh.

bath hotel which he had set up at Helensburgh.

The progress of steam navigation was afterwards rapid, particularly in the United States, owing to the number and extent of its rivers, for which alone steamers were at first considered to be adapted. As improvement advanced, however, and confidence increased, they came gradually into use as marine vessels, for which purpose they were first fitted in 1818 by David Napier, engineer, Glasgow, who, from that year until 1830, effected more for the improvement of steam navigation than any other man; and whose cousin, Robert Napier, is also honourably distinguished in the same walk. Mr David Napier established regular steam communication between Britain and France and Ireland; by degrees almost all parts of the shores of Europe were traversed in like manner; and in 1838 a line of steamers, of gigantic size, commenced running between England and the United States. Steam-vessels have since been adopted for many other parts of the ocean; and their increasing use in every civilized country has produced, and is daily producing, results which it is impossible fully to estimate.

We refrain from entering into any details respecting the formation of steam-vessels; but we may notice that of late years not a few have been built of iron, from its superior buoyancy to wood; and that a magnificent one called the Mammoth or Great Britain, is about to be launched at Britslo, on which 1500 tons of iron have been expended. Her dimensions are given as follows:—Length of keel,

STE

iron have been expended. Her dimensions are given as follows:—Length of keel, 282 feet; length over all, 324 feet; breadth, 51 feet; depth of hold, 32 feet; power of engines, 1000 horses; burden, \$200 tons; displacement, 3000 tons; and load draught, only 16 feet. The hull is divided into five distinct water-tight compartments. Another important feature in the Great Britain is the adoption of the screw propeller, which will save the cumbrous appendages of paddle-wheels and boxes. The screw propeller, as originally tested by the Archimedes steamer, was placed in the dead wood under its counter, and between the keel and stern post; placed in the sada wood inder the counter, and between the ker and steen posts; and it consisted of a helix, making but one revolution about a horizontal axle passing longitudinally through the ship, and put in motion by a steam-engine. But this plan is said to be considerably modified and improved in the Great Britain. Should this bold experiment prove successful, it will probably lead to an entire revolution in the system of steam navigation.

revolution in the system of steam navigation.

The number and tonnage of British steam-vessels cannot be very accurately stated, because no correct information can be obtained respecting unregistered vessels, which ply only within the limits of their respective ports; and which appear to be very numerous in the Mersey, Humber, Thames, Clyde, and other rivers. According to an approximate statement prepared in 1839, the merchant-steamers at the end of 1838 were, for the British islands, 766 in number, having a burden (including 62,630 tons for engine-room, &c.), of 142,168 tons; and adding the aggregate colonial tonnage in 1837, 15,664 tons, there is given a total for the empire of 167,840 tons, the amount of horse-power being 63,250. Of the 766 British steamers, 454 were river steamers and small coasters, and 282 large coasters and sea-going ships. In 1838, the United States possessed an aggregate steam-tonnage of 155,473 tons, and 67,019 horse-power.

On December 31, 1841, the registered mercantile steam-marine of the British islands amounted to 95,795 tons; but adding to this the engine-room tonnage, and allowing for colonial and unregistered vessels, the aggregate must have amounted to fully 200,000 tons, exclusive of steam mail-packets and vessels of war, of which a large and yearly increasing fleet is now maintained.

A large steam-navy is now also possessed by France; but very few war-steamers have as yet been built in the United States. The number of steam-vessels possessed by other countries is comparatively inconsiderable. B

comparatively inconsiderable.

STEARIN, the harder portion of animal fats; olein or claim being the softer one. Stearin yields an acid, called stearic acid, and having the form of brilliant white scaly crystals, which is now largely employed in soap and candle making. STEATITE, a species of soap-stone found in Scotland, Anglesea, and many other parts. The white varieties, or those which become so by calcination, are used in the manufacture of porcelain; others are employed for fulling. STEEL, a compound of iron and a minute quantity of carbon. [IRON.] STEELYARD, a weighing-machine consisting of a lever of unequal arms. STERLING, a term which has long been applied to the standard money of England. The derivations of this word, offered by various authors, are numerous perhaps beyond those of any other in our language. See Ruding's Annals of the Coinage of Britain, vol. i. p. 21-24.

STOCKS. [Funns.]

STONE, the name of a weight in different parts of Europe. The standard Bri-

tish stone = 14 lbs. avoirdupois. Formerly the stone of butcher-meat or fish in London (still partially used) was only 8 lbs. avoirdupois; while in Scotland, the common commercial stone was 16 lbs. Scots troy = 17.39 lbs. avoirdupois. STONE-TRADE. The principal kinds of stone used in building are the lime-

stones or calcareous rocks of the geologist, commonly called freestone; of these it would be useless to describe or enumerate more than a few. In England, Portland stone, so called from its principal quarries being in Portland sland, Porset-shire, holds the first rank, and is that used in London for stone building, and for shire, holds the first rank, and is that used in London for stone building, and for the ornamental parts of edifices. St Paul's, Westminster and Blackfriars Bridges, Newgate, and indeed most of the public buildings of the metropolis, are examples of its use. About 30,000 tons of Fortland stone are said to be annually exported to London; the best blocks bringing from 18s. to 22s, per ton; and the inferior from 6s. to 8s. Bath stone, used in that city and neighbourhood, is softer and far less durable than the preceding. Purbeck stone, from Dorsetshire, coarser and harder than the preceding, is valued for steps, paving, door-sills, and copings. Yorkshire stone resembles the last. Ray stone, obtained from quarries on the banks of the Thames and Medway. is used for paying. The quarries of Gateshead Fell of the Thames and Medway, is used for paving. The quarries of Gateshead Fell furnish the celebrated "Newcastle grindstones." There are various other kinds; as, Oxford stone and Ketton stone, distinguished according to their principal locali-But, upon the whole, the quarries in England are not of any great extent

or value; and bricks are in consequence the chief building material.

In Scotland, however, where stone is used almost to the entire exclusion of bricks, the quarries are numerous and some very excellent, particularly Craigleith, near Edinburgh, and Cullalo in Fife. Superior granite is also found in various places, particularly near Aberdeen, from whence about 12,000 tons are annually shipped to London for works where strength and durability are required; and in Kirkcudbrightshire, from whence that employed in the construction of the Liver-

pool Docks was partly derived.

In Ireland, there are quarries of granite in the county of Dublin, and near Newry

pool Docks was partly derived.

In Ireland, there are quarries of granite in the county of Dublin, and near Newry, in the county of Down; red sandstone in Tipperary and the county of Cork; and limestone, of a rich kind, in Queen's County, and in the counties of Dublin, Meath, and Cork. Other varieties of stone are found in different parts. S STOPPAGE IN TRANSITU, is the right which the seller of goods has to stop them in their passage to the buyer, if the buyer has become bankrupt or insolvent before they come into his custody, and is unable to pay their price. It has been the subject of much debate whether this right partakes of the nature of lien, or is an exercise of property on the part of the seller; but no practical rule has arisen out of these discussions, and the right is practised as an arbitrary exercise of expediency. It remains then simply to state the circumstances in which, according to the tenor of the decisions, it may be exercised. "All persons standing in the relation of vendor and vendee, or consigner and consignee, on a sale or consignment of goods on credit, may exercise the right of stoppage in transit; and there are cases in which the law recognises this right, though the contract under which the goods have been consigned may not be literally a contract of sale. Hence, where a factor or agent, by order of his principal, purchases goods for him, and consigns them to him on credit, with an additional charge on account of commission, making himself liable to the original vendor in the first instance, and no privity exists between such vendor and the principal, as to be entitled to stop them in transitu, upon the insolvency or bankruptcy of the latter, though he may not perhaps be considered as standing in that relation for all purposes" (Cross, 363-4). There is no analogy to a general balance. On the other hand, if the balance of accounts between the parties, taking the price of the goods into consideration, be not against the buyer—in other words, if it was so much in his favour that the de

his servants, there can be no doubt that the right exists, or, more properly speaking, the right of keeping possession exists; on the other hand, when they have come under the order of the purchaser, by being in the hands of himself or his servants, there is as little doubt that the right ceases. The time for its exercise is while the property is in the hands of a middle-man, who holds for the benefit of whichever party has a just legal claim. A shipowner, carrier, packer, wharfinger, is such middle-man. The property is liable to stoppage though the middle-man has been appointed by the consignee. But the consignee's connexion with the middle-man may be such that the latter's repositories are virtually those of the consignee, having been hired by him; so if the purchaser use the wharfinger's or packer's warehouse as a place for the custody and disposal of his goods, it is virtually his own warehouse, and the right to stop ceases on their arrival there. If the consignee keep the goods in the seller's warehouse, paying warehouse rent, the seller has ceased to have any control over them. There may be a commencement of delivery not so far completed as to give the purchaser sufficient possession to bar stoppage. Thus, where a bargeman, intrusted with a carge of iron, landed part of it at the vendee's wharf, but hearing that the consignee had become bankrupt, immediately Thus, where a bargeman, intrusted with a carge of iron, landed part of it at the vendee's wharf, but hearing that the consignee had become bankrupe; immediately re-loaded it, it was found that he legally used the right of stoppage in favour of the seller (Crawshay and Others v. Eades, 1 B. & C., 181). When there is a right to stop in transitu, it is sufficiently exercised by notice being given to the middleman in whose hands the property is; if he should disregard the notice and deliver the goods, the delivery will not be valid. (Cross on Lien and Stoppage in Transitu, 361, et seq.) STORAGE, warehouse rent.

STORACK, warehouse rent.

STORACK, a balsam obtained from the Styras officinalis, a tree found in the Levant, Italy, and France. It was formerly used in medicine.

STORES, the supplies of food, liquor, and other articles provided for the subsistence and accommodation of a ship's crew and passengers. [Customs Regu-

istence and accommodation of a ship's crew and passengers. [Customs Regulations. Warehousing System.]

STRANDING OF A VESSEL. In recovery of losses from underwriters, it is often a question of material consequence, whether the vessel was or was not "stranded," according to the legal meaning of the term. [Policy.] To constitute stranding, it is not sufficient that the vessel has struck, if she has been speedily got off, however much she may be injured. In Wells v. Hopwood (3 B. & Adol. 20), a vessel arrived in a tide harbour, and proceeded to discharge her cargo at a quay on the side, which could be done at high-water only, and could not be completed in one tide. At the first low ebb the vessel grounded on the mud, but, on a subsequent ebb, the rope by which her head was moored to the opposite side of the harbour stretched, and the wind blowing from the east at the same time, she did not ground entirely, as it was intended she should, in the mud, but her forepart got on a bank of stones and rubbish. The vessel was strained, and her seams opened, closing again at high tide; and though she was in the end uniquired, the cargo was damaged, and it was held a stranding. In this case Lord Tenterden observed, "That where a vessel takes the ground, in the ordinary and usual course of navigation and management, in a tide river or harbour, upon the ebbing of the flow of the tide or increase of water, such an event is not to be considered a stranding within the sense of the memorandum. But where the ground is taken under flow of the tide or increase of water, such an event is not to be considered a stranding within the sense of the memorandum. But where the ground is taken under any extraordinary circumstances of time or place, by reason of some unusual or accidental occurrence, such an event shall be considered a stranding within the meaning of the memorandum." In Kingsford v. Marshall (8 Bingh. 458), the ground was taken where the master intended, but the vessel in taking it struck against some hard substance which pierced the bottom. The cargo was damaged, but this was held not to constitute a stranding. "If the ship," says Mr Marshall, "be forced aground, and remain for any time stationary, whether it be on piles, on the muddy bank of a river, or on rocks on the seashore, provided there be a settlement of the ship, so that the voyage is actually interrupted, that is a stranding, without reference to the degree of damage she sustains "(232). (Park on Insurance, 177, &c. Marshall on Insurance, 231-234.) [INSURANCE. POLICY.]

STRAW-PLAT consists generally of the stalks of wheat, but sometimes also of those of rice, rye, or darnel grass, which are platted in order to be made up into hats or bonnets. This branch of industry, which is every where of a domestic kind, appears to have originated in Italy, and to have been introduced about the middle of last century into England. The large size of the wheat-straw, however, in this country operated against the manufacture until within the last 50 years, when, owing to the adoption of splints or alips of straw in lieu of whole straws, and the interruption of the Italian trade by war, it rose into importance in Bedfordshire, Hertfordshire, and Buckinghamshire; the principal markets being Luton, Dunstable, and St Albans. Various kinds of plat are distinguished in trade, but they are continually changing with the caprice of fashion.

The straw used in Tuscany, the great straw-plat district of Italy, is said to be ing within the sense of the memorandum. But where the ground is taken under

that of Triticum inegidum, a variety of bearded wheat, cultivated solely for the straw; being sown close, and consequently produced thin and short: the upper joint of the stalk is that chiefly used. The beauty of the Tuscan plat is also greatly increased by the mode of joining it so as to form, by the combination of several narrow strips, an extended sheet of platted work. British plat, again, is common-

narrow strips, an extended sheet of platted work. British plat, again, is commonly joined by making the several rows of plat overwrap each other a little, and then joining the two overwrapping pieces with a needle and thread; and the articles made of split-straw are besides inferior to those of whole-straw of equal fineness, in pliability and durability. The Tuscan manufacture is chiefly followed in the neighbourhood of Florence, Pisa, Sienna, and the Val d'Arno. SSTURGEON, a large cartilaginous fish (Sturio), of which there are several varieties. It is caught occasionally on various parts of our coast, most frequently in the estuaries, or but a short distance up rivers; and is frequently brought to the London market from various localities. In the N. of Europe, the Caspian, and other places, the sturgeon fisheries are of great importance. Caviar is made of the roe of the female; isinglass is obtained from the dense membrane forming the air-bladder; and the flesh, besides being preserved by salting and pickling, is in request for the table while fresh.

SUCCADES, sweetmeats or preserves in sugar.

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inheritances, imposed by Augustus on the Romans, is the earliest example we have of a tax upon the transference of property from the dead to the living. Many of the casualties of the feudal law were of the same nature; but the Dutch appear to have been the first to adopt succession taxes in their modern form. In this country, up to the session of 1853, real property was exempt, and they were levied solely upon personal property, which is effected partly by a stamp-duty proportioned to the amount of the deceased's effects, but graduated differently for testate and intestate successions,—and partly by per centage duties on legacies or residues. Succession duties are objectionable in principle [Tax], being in the general case a tax on capital; but, on the other hand, they possess the advantage of being easily collected.

SUGAR (Du. Suiker. Fr. Sucre. Ger. Zucker. It. Zucchero. Por. Acucar. Rus. Sachar. Sp. Asucar. Arab. Sukkur. Malay, Soola) exists in all vegetables having a sweet taste, but is obtained chiefly from the sugar-cane (Saccharum officinarum), which contains it in greater quantity than any other plant. The sugar-cane thrives from the equator to the 32d degree of latitude. It is one of the largest cinerium), which contains it in greater quantity than any other plant. The sngarcane thrives from the equator to the 32d degree of latitude. It is one of the largest of the grasses, growing from 8 to 12 feet in height, and acquiring a diameter of one or two inches; the sugar being contained in the loose, cellular, juicy pith with which the stalk is filled. In the British West Indies, from August to November is generally considered the best time for planting the cane. When ripe, commonly about March or April, it is cut off at the root, stripped of leaves and ends, and then passed twice through a mill so as to express all the juice. To prevent fermentation, a portion of lime (about 1 to 1600) is mixed with the juice, which is then evaporated by a moderate and cautious ebullition. When the syrup is sufficiently concentrated, it is drawn off into shallow wooden coolers, where it becomes a soft solid, composed of loose crystalline grains. It is then put into barrels with holes in the bottom, through which a black ropy juice, called molasses, gradually drops, leaving the crystallized sugar comparatively white and dry. In this state it constitutes raw or muscovado sugar. This generally concludes the process with the planters in the British colonies; but in many foreign settlements it is usual to purify the raw sugar partially, by covering its surface, in conical shaped vessels, with a layer of moist clay,—the water from which gradually filters through it, carrying off some molasses. Sugar thus treated is called clayed sugar, and has lost its crystalline appearance. In this country the raw sugar is purified by boiling a solution of it with white of eggs, or the serum of bullocks' blood, lime-water being commonly used at the same time. When properly concentrated, the clarified juice is received in conical earthen time. When properly concentrated, the clarified juice is received in conical earthen process; the chief improvement of which consists in conducting the evaporation are repeated. Sugar, however, is now mostly re By this plan there is much less empyrenmatic syrup formed; and even a considerable quantity of sugar can be obtained from molasses.

A more regular form of crystallization is given to sugar by carrying the evaporation only a certain length, and then permitting the syrup to cool slowly; but the addition of spirit of wine is necessary in order to make it crystallize, otherwise it forms barley sugar. In crystals it is called brown or white sugar candy, according to its purity; the latter being the purest form in which sugar exists. Sugar candy is the only kind of refined sugar made in China and India: the Chinese sugar-candy, which is of the finest anality is consumed in the European settlements in the East

only kind of refined sugar made in China and India: the Chinese sugar-candy, which is of the finest quality, is consumed in the European settlements in the East to the almost total exclusion of other sugar. Bastards is a coarse kind of crusted loaf sugar, made from the syrups and other refuse of the best sugar. Raw sugar should be dry, in large sparkling hard grains, of a clear yellow colour, without smell, and of a strong sweet taste, without any peculiar flavour. It varies very much in quality. It is chosen, for the purpose of refining, by the sharpness and brightness of the grain; and those kinds are preferred which have a peculiar gray hue. Soft-grained yellow sugars, although whiter, are not so fit or refining; for which reason sugars from particular countries are seldom used. The best are those of Jamaica and other parts of the West Indies; while the East India, Java, Manilla, and Siam varieties are generally of low quality.

Refined sugar should be very hard and brittle, of a close compact texture, and break with sharp, semi-transparent, splintery fragments. It should have a brilliant

Refined sugar should be very hard and brittle, of a close compact texture, and break with sharp, semi-transparent, splintery fragments. It should have a brilliant white colour, a pure sweet taste, and should dissolve entirely in spirits.

The use of cane-sugar is said to have originated in China, from whence the plant was conveyed to India, Arabia, and Egypt; through which channels it became early known in Europe, where, however, its culture made little progress until the period of the Crusades (1099-1244), when the increased communication with the East tended to spread a taste for sugar throughout the Western world. In the 12th century, sugar-planting was extensively followed in Sicily; thence, or through the Moors, it passed to Spain, Madeira, and the Canaries; and shortly after the discovery of America the cane was carried to Hayti and Brazil, from whence it gradually spread through the West Indies. Aided by slave labour, sugar soon became the most important staple of those countries; and the supplies required by became the most important staple of those countries; and the supplies required by the European states were long almost exclusively derived from their American the European states were long almost exclusively derived from their American settlements,—each generally granting, by means of fiscal regulations, a monopoly of its home market to its own colonies. The subsequent progress of the trade it is nunceossary to detail in this place. Suffice it to say, that, notwithstanding the shock given to industry in the British possessions by the measure of slave emancipation (1838), the exportation of sugar from the different countries from which the European market is chiefly supplied, was estimated in 1839 as follows:—British West Indies and Mauritius, 3,571,378 cwts.; British India, 519,125; Danish West Indies, 450,000; Dutch do., 260,060; French Sugar Colonies, 2,160,000; United States, 900,000; Brazil, 2,400,000; Spanish West Indies, 4,481,342; and Java, 392,475; total, 15,634,390 cwts. Of this fully one-fourth was sent to the United Kingdom, where sugar is more generally used than in any other part of Europe. The produce of the British sugar colonies formerly exceeded the wants of the home market, and the surplus was generally shipped to Hamburg and other continental ports; but of late years the ratio of the supply to the demand has been entirely changed, partly through the increased wants of our augmented population, and partly owing to the falling off in the sugar crop of our West India colonies, in consequence of the disinclination of the emancipated negroes to the hard labour requisite for the cultivation of the cane. Through the latter cause mainly, the

in consequence of the disinclination of the emancipated negroes to the hard labour requisite for the cultivation of the cane. Through the latter cause mainly, the imports from these colonies gradually declined from 4,103,800 cwts. in 1831, to only 2,214,764 cwts. in 1840, and 2,151,217 cwts. in 1841; and as foreign produce was at the same time shut out by a prohibitory duty, the consequence was a rise of price, until, in November 1840, British plantation sugar in bond averaged 57s. 104d, per cwt.; Brazilian, of nearly equal quality, being at same time only 22s. This difference led, in 1840, to 2316 cwts. of foreign sugar being entered for consumption, notwithstanding the high duty of 63s, the cwt. with which it was burdened. Afterwards our supply was augmented, chiefly by an increased importation of East India sugar, the duty on which had been lowered to the same rate as West India in 1836. Still, down to 1843, the price of raw sugar in Britain averaged from 10s. to 20s.

Still, down to 1843, the price of raw sugar in Britain averaged from 10s. to 20s. per cwt. higher than on the Continent.

The annexed table shows the total imports into the United Kingdom since 1824, the quantity of different kinds retained for home consumption, the produce of the duty thereon, and the average price of British plantation muscovado sugar, in bond, as taken from the London Gazette:—

1	Retained (for Consumption i	l	Price of Bri-			
Total Imports.	British Plantation and Mauritius.	British B. India.	Fereign.	Total.	Produce of Duty.	tish Plant. per Cwt.	
Cets	Cwts.	Cwts.	Curte.	Cwts.	L.	s. 4.	
						38 6	
4,419,095		143,312		3,573,990		30 7	
4,110,018	3.270.885	69.856	186	3,340,927	4,650,192	35 9	
4,968,020	3.504.164	97.944	11	3,601,419		31 8	
4.856,393		118,400	12	3.539.821	4.896.242	28 7	
4.916.004	3.590.041	131.979	24	3.722.044	4.767.342	24 11	
				3.781.011	4,650,590	23 8	
					4,394,338	27 8	
						29 8	
					4.559.392	29 5	
						33 5	
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	3,908,135 4,419,095 4,110,018	Tetal Imports. Corts. 3,908,135 4,419,095 4,110,018 3,270,885 4,963,020 4,856,303 3,421,409 4,856,303 3,421,409 4,856,303 3,421,409 4,856,303 3,421,409 4,856,303 3,621,409 4,857,749 3,573,329 4,730,292 4,743,414 3,600,522 4,743,414 3,600,522 4,743,414 3,600,522 4,743,414 3,600,522 4,743,414 3,649,191 3,787,851 4,649,191 3,787,851 4,649,191 3,787,841 4,649,191 3,781,44 4,82,578 3,684,719 5,103,374 3,491,295 4,638,345 4,005,013 2,992,142	Tutal Imperts. Costs	Tutal Imperts. British Plasintins and Mauritins. British E.India. Foreign. Cotts. Cott	Certs. 3,908,135 2,972,623 107,200 25 3,079,848 4,419,095 3,430,652 143,312 26 3,573,990 4,916,004 3,570,885 6,986 198 3,340,927 4,966,020 3,504,164 37,944 11 3,601,419 12 3,539,821 4,916,004 3,575,329 79,600 605 3,635,364 4,739,292 3,567,365 198 3,722,044 11 3,611,419 113,566 79 3,731,011 3,673,992 4,739,292 3,567,386 198,283 71 3,651,534 4,739,292 3,553,460 362,283 71 3,651,504 4,743,414 3,620,522 11,007 50 3,741,579 4,448,677 3,787,831 96,690 31 3,865,534 4,649,161 3,378,144 110,522 33 3,488,399 4,462,578 3,584,712 270,055 43 3,948,399 4,462,578 3,344,298 4,72,283 4,905,018 2,972,684 818,320 2,316 3,684,519 4,693,193 3,484,298 4,77,253 49 3,625,599 4,033,845 3,074,198 818,320 2,316 3,684,814 4,905,018 2,992,142 1,065,032 2,376 3,684,834	Total Imports British Plastation British E.India. Proviges Total. Produce of Duty.	

1840 4.035,018 3,093,141 1,068,032 2,7 4,068,431 5,133,066 38 11
1841 4.005,018 9,999,142 1,068,032 277 4,068,431 5,133,066 38 11
1842 4.005,018 9,999,142 1,068,032 277 4,068,431 5,133,066 38 11
1848 4.005,018 1,068,036 1,068,037 103 3,776,468 4,884,415 81

The 4,035,646 ewis. imported in 1840 (the latest year of which the details are furnished in the official tables) were composed of 2,214,764 cwis. from British W. Indee, 846,077 from Imaritius, 496,730 from E. Indee, 366,915 from foreign West Indee, chiefly Cuba, 315,562 from Imaritius, 498,730 from E. Indee, 366,915 from foreign West Indee, chiefly Cuba, 315,562 from Imaritius, 498,730 from Elan, 1825 from Colombia, and 53,833 cwis. from other places. In the same year, 230,000 cwis. were re-exported, chiefly to Germany, Russia, the Netherlands, and Italy.

A considerable quantity of the imports is convexted into refined sugar, a manufacture which from a import molabrania milk of the convexted into refined sugar, a manufacture which from a proportion of the convexted into refined sugar, and sugar thus employed, about 500,000 cwis. yearly (mostly foreign produce) are refined in bond for exportation, under the act 3 at 4 Win. IV. c. 61. Where a duty has been paid on colonial sugar refined, it is drawn back on exportation, at the rate shown in the tariff, which, up to 1843, was 30s. 8d per cwit. on single, and 35s. 8d. on double refined. The exports of refined sugar, in 1840, amounted to 235,179 cwis.; of which Italy took 70,066 cwis.; Turkey, 33,376 cwis.; British America, 30,187 cwis.; British M. Indies, 20,058 cwis.; Russis, 15,165 cwis.; Australia, 19,267 cwis.; and Spain, 11,910 cwis. Formerly the exports were much more considerable, owing to the demands of Germany and Prussia, shipments to which have almost entirely ceased, these countries now refining for themselves.

A duty on British plantation is ugar imported into England of Is. 6d. per cwt. was imposed in 1661; which rate was doubled in 1669. The duty was 3s. 4d. the cwt. from 1795 to 192, 3s. do. 19

MAPLE STEAR is composed of the evaporated sap of the maple-tree (Acer saccharinesm), cast into moulds about the size of a brick. It is made chiefly in N. America. The quantity produced in Canada has been reckoned at \$3,500 cetts, equal to more than 2000 hids. of wet India super. Further information on the subject of this article will be found in Moseley's Treatise on Super, Educated' History of the West India, Porter on the Nature and Properties of the Super-Cane, Ure's Dictionary of Arts, and under the heads INDIA (BRITISE) and WEST INDIAS.

SUGAR OF LEAD, more properly acetate of lead, is prepared by digesting litharge or other oxides of the metal in pyroligneous acid. It has a singularly sweet and somewhat astringent taste. Sp. gr. 2.57. It crystallizes in white acicular masses, the state in which it generally occurs in commerce. It is used in medicine,

masses, the state in which it generally occurs in commerce. It is used in medicine, dyeing, and calico-printing.

SULPHUR, on BRIMSTONE (Fr. Souffre. Ger. Schwefel. It. Zolfo), an elementary, combustible, solid, non-metallic substance, of a peculiar yellow colour, and very brittle. It has neither taste nor smell, though when rubbed it has a faint peculiar odour. Sp. gr. after being fused, 1990. When pure it is bright yellow, and very inflammable; burning with a clear blue flame, and leaving no residuum. It is an abundant product of nature, especially in volcanic districts; and in other places exists in combination with exygen and sundry metals. It occurs in various forms. Native sulphur, largely imported from Sicily, in square or oblong masses or blocks, called rough brimatone. Stick or roll sulphur is chiefly obtained from sulphuret of copper in this country. Sublimed sulphur, or flowers of sulphur, is a fine crystalline bright yellow powder, obtained by condensing the vapour of sulphur rapidly in capacious receivers. Refined sulphur is that purified by distillation in an iron still, and condensed in an iron receiver kept cool by water. Sulphur is employed for making gunpowder, sulphuric acid, and for a variety of Sulphur is employed for making gunpowder, sulphuric acid, and for a variety of other purposes in the arts; it is also employed in medicine.

The chief supply of this mineral is obtained in Sicily, our imports from which have greatly increased since 1825, when, owing to a reduction of the import-duty from £15 to 10s. a-ton, and the increased demands of our manufactures, the annual consumption of Sicilian sulphur increased in 12 years from 7000 tons to between 30,000 and 40,000 tons. A great increase likewise took place in the imports into France. In July 1838, the Sicilian government, in consideration of a bonus of 400,000 Neapolitan ducats a-year, granted to a French company a monopoly of the sulphur-mines, the produce of which was to be limited to 600,000 quintals, to be supplied to them at fixed prices; but this monopoly, after an armed remonstrance from Britain, in consequence of its being at variance with commercial treaties, was abolished in July 1840; and the trade is now on its former footing.

Was adolished in July 1640; and the trade is now on its former footing. Some state of the control of the former footing. Some state of the control of the control of the former footing. Some for sulplur, and one of water. When as pure as usually prepared, it is of the specific gravity 1647. This acid was formerly obtained by the decomposition of green vitriol, whence its old name of oil of vitriol; but it is now procured by burning a mixture of about 3 parts sulplur and 1 of nire, in a furnace so placed that the resulting fumes may pass into close leaden chambers containing water. The fumes as they arise are absorbed by the water, which gradually becomes a dilute sulphuric acid; and the acid is procured in a concentrated state by evaporation of this solution. The annual amount of this manufacture in Britain is calculated by Mr Brande at 50,000 tons; which, estimated at 10s, per cwt., makes its value £500,000.

There is perhaps no substance more abundantly employed in the arts and manufactures. It is used in medicine. It is employed by bleachers for souring the cloth; by dyers for dissolving their indigo; by calloo-printers; by brassfounders, button-makers, gilders, and japanners, for cleaning the surface of the metals with which they work; and by hattern, tanners, paper-makers, and many others. It is also used extensively in many chemical manufactures.

SUMA CH (Fee Summes Con Schareck). It Summes a church (Phase conicial)

SUMACH (Fr. Sumac. Ger. Schmack. It. Sommaco), a shrub (Rhus coriaria) which is a native of Persia and Syria, as well as the S. of Europe. Its shoots, after being cut, dried, and reduced to powder, are used for the purposes of dyeing and tanning. An ounce contains 78 or 79 grains of tannin. Of all astringents it bears the greatest resemblance to galls. It is considered of good quality when its odour is strong, colour of a lively green, well ground, and free from stalks. The best is the Sicilian. Nearly 500 tons are annually consumed in this country. SIMATRA [Exercise 18]

SUMATRA. [EASTERN ISLANDS.]
SUNN, a material similar to hemp, the produce of the Cortaloria juncea, in meral use in the hotter parts of Asia for cordage. In India, two kinds are distinguished, phool and boggy. The first of these is the most esteemed.

SUPERCARGO, a person employed in a ship to oversee the cargo or trade.

SUPPLIES, the sums annually granted to the sovereign by parliament.
SURVIVORSHIP, in life assurance, is a reversionary benefit contingent upon
the circumstance of some life or lives surviving some other life or lives, or of the
lives falling according to some assigned order. [INTEREST, COMPOUND.]

SUWARROW OR SAOUARI NUTS, are a species of BUTTER NUTS or berries,

SUWARROW OR SAUUARI NULL, are a species of DUTTER NUTS of DETROS, the produce of a large tree (Caryocar tomentosum), which grows in Guiana.

SWEDEN, a country of the N. of Europe, forming the eastern and more important section of the Scandinavian peninsula, lies between latitude 55° 20' and 69° N., and longitude 11° 10' and 24° 12' E.; having N.E. Russian Finland; E. and S. Gulf of Bothnia and Baltie; S.W. Sound, Cattegat, and Skager Rack; W. and N. Norway. Area, 170,000 sq. miles. Population in 1839, 3,109,772. Government, a hereditary monarchy, with a state-council and a representative diet. B

N. Norway. Area, 170,000 sq. miles. Population in 1839, 3,109,772. Government, a hereditary monarchy, with a state-council and a representative diet. S Sweden may be generally described as rather a flat country; except the frontier towards Norway, and the N. part, which is diversified with mountains, deep valleys alternating with sandy wastes, and in some parts forests. The central region contains extensive plateaux of table-land, covered with trees. And the S. provinces consist chiefly of sandy plains, interpared with lakes and hills, which are sometimes bleak and barren, but elsewhere elothed with woods. The country is watered by numerous lakes and rivers; and the use of both for internal navigation is facilitated and extended in some places by canals; the chief work of this kind being the celebrated Gotha Navigation from Gottenburg to Soderkeping, connecting the Cattegat and the Batilia. The climate in the S. and W. parts is similar to that of the N. of Germany; but towards the N. it is severe, though much milete than might be expected from its high latitude.

The soil, though mostly thin and poor, has been greatly improved by culture, especially around Caristad and Lake Wetter. The chief agricultural products are—rye in the S. and the supply is now more than equal to the consumption. Flax is also grown, and in some places madder, buckwheat, wood, and tobacco. Domestic animals are numerous, but inferior. The chief articles for export are derived from the mines and the forests, particularly the former, which are mostly situated in the central provinces; their chief product is iron [Ison]; copper and lead, howeve, being also worked to some extent; but there is no ceal. The forests, though covering nearly one-half of the surface, contain a comparatively small number of timber trees; and the export of wood is, from this cause, mot so considerable as might at first be supposed.

The manufactures are chiefly domestic, the peasantry supplying themselves, as winter employment, with nearly all the coarse woollens, li

Massures and Weights.—The alm or ell of 2 feet = 23:38 lmp, inches; and 100 ells = 64:94 lmp, yards; the fathom is 3, and the ruths ells. The Swedish mile = 2250 ruthes = 11659 lmp, yards, or about 6 lmp, miles, 5 furlogs.

The tunnaland = 1:220 lmp, acre.

The kann, lquid messure, contains 2 stoops, or 8 quarters; and 100 kanns = 57:56 lmp, gallons; the anker is 15, the elmer 30, the tunns alm 60, the oxhufuud 90, the pipe 130, and the fuder 330 kanns.

The tunna, corn measure, of 2 spann, 8 fjerdings, 32 kappar, or 56 kanns, = 4:029 lmp, bushles; but as 4 kappar are allowed to every tunna of whest, oats, rye, or barley, for good measure, the tunna of corn may be estimated at 43 lmp, bushles.

The commercial weight is termed victuality wigt, of 2 marks, 32 lods, or 128 quentins = 8846 butch as = 6563 troy grains; is alm 100 lks and the found or skolpand, victuality wigt, of 2 marks, 32 lods, or 128 quentins = 8846 butch as = 6563 troy grains; also 100 lbs. victuality wigt; as 5653 troy grains; also 100 lbs. victuality wigt; the sten, 32 lbs, in copper, and a depreciated almost entirely of copper, and a depreciated paper money. The paper is of two kinds: Banco, consisting of the notes of the National Bank, is that commonly employed by shopkeepers, and the skeppund is 20 lbs. rictuality, or miner's weight, and the pound or 460 lbs. victuality.

are exchanged for rixdollars specie, at the rate of 23 of the former for one of the latter. Riksgald is of only 3d steep the of the state. Riksgald is of only 3d steep the of 1842, and the rixdollar is thus worth—in banco pald. The rixdollar is thus worth—in banco, about 13d, steep the budget of 1842, amounted only to 10,742,860 rixdollars banco, about 1a, 8d,; and in riksgald, la 13d, sterling.

SWEETS, an English fiscal name for home-made wines and sweetened spirit-uous compounds. The trade between the different portions of the United King-

dom is regulated, in respect to countervailing duties and drawbacks, by the act 6 & 7 Wm. IV. c. 72. Every retailer is required to take out an annual excise-license, costing £1, 1s.

SWITZERLAND, a country of Central Europe, bounded N. and E. by Germany; S. by Italy; and W. by France. Area, 15,257 sq. miles. In 1850, the population was 2,395,000. It is a confederation of 22 states or cantons, namely, Schaffhausen, Thurston Turish Agreen Radio Solaron Berne Lucerna Zurish Agreen Radio Solaron Berne Lucerna Zurish Agreen Solaron Berne Lucerna Zurish Schweitz. Se

many; S. by Italy; and W. by France. Area, 15,257 sq. miles. In 1850, the population was 2,395,000. It is a confederation of 22 states or cantons, namely, Schaffhausen, Thurgan, Zurich, Aargan, Basle, Soleure, Berne, Lucerne, Zug, Schweitz, St Gall, Appenzell, Glarus, Uri, Unterwalden, Friburg, Neufchatel, Vaud, Geneva, Valais, Tessin, Grisons; all democratic republics except Neufchatel, in which the King of Prussia exercises sovereignty. S

Switzerland is the most mountainous country of Europe. The ranges of the Alps, and their numerous offets, extend over the S. and S.E. districts, occupying about one-half of the surface. Along the W. boundary runs the Jura ridge; and the country between these two mountain-systems has towards the S. the form of a plain, interspersed with isolated hills; and towards the N. it is traversed by groups of hills of moderate elevation. The Alpine and other mountain-chains are separated by deep valleys or narrow plains, which form the beds of extensive lakes, as Geneva, Constance, Noufchatel, Lucerne, and others; or the basis of large rivers, such as the Rhone, Rhine, Inn, Ticino, and Doube, which all rise in Switzerland. This difference of elevation produces a singular variety of aspect and elimate; for, while the valleys are soorched by heat, perpetual winter reigns in the heights: but, upon the whole, the country is cold for its latitude. Switzerland is almost wholly a pastoral country. Except in Thurgau, little corn is produced; and cattle (800,000), sheep, and goats, constitute the chief riches of the rural population. The land is mostly divided among numerous small proprietors, whose diminuity patches compying but a part of their time, they are necessarily led to employ the remainder in waving and such like employments, in which they engage for a mere pittance of wages. This, joined to low fiscal burdens, and the absence of all restrictions on trade or free intercourse with foreigners, has led to manufacturing industry being in a considerable state of advancement in Switzeriand

Chief cities, Geneva, Beale, Zurich, Berne, St Gall, Lausanne, Schaff hausen and Appensell.

Measures and Weights.—In 1837, Berne, Zurich, Lucerne, Friburg, Zug, Soleure, Basie, Aargau, Thurgau, Schaffhausen, Glarus, and St Gall, Adopted the following measures and weights founded upon the French metrical system:—

The foot = 3 decimètres; and 16,000 feet = 1 stunde = 5249 Imp., yarda. The stunde = 5249 Imp. yarda. The stunde = 5249 Imp. yarda. The mass = 1½ French litre; and 100 mass = 3301 Imp. gallons. The viertel = 10 mass = 165 Imp. bushels. The pound of 32 loths = ½ tilogramme; and 100 Britain, and France, 30 days' sight; from Germany and Italy, 15. Days of grace abolished.

TAEL, a Chinese weight; also a money of account. [CHINA.]
TALC, a mineral allied to mica, used in tracing lines on wood, &c.
TALLOW (Fr. Suif. Ger. Talg. It. Sego. Por. and Sp. Sebo. Rus. Salo, toplenæ), animal fat separated by fusion from the membrane in which it occurs, and clarified. It is procured chiefly from oxen and sheep. It is firm and brittle, has a peculiar odour; and is applied to various uses, but particularly to the manufacture of soap and candles, and the dressing of leather. Tallow is an important article of trade in the United Kingdom, where, in addition to the native supply, estimated at 120,000 tons, about 60,000 tens are annually imported: which last,

excepting trifling quantities from the La Plata states and Sicily, is brought almost exclusively from Russia.

exclusively from Russia average about 65,000 tons annually, 9-10ths of which are shipped from St Patersburg, where five kinds are distinguished: 1. Yellow candle, in two sorts: this kind is obtained from oxen, and about 6-7ths of the whole shipments are composed of the first sort. 2. Lopatry, in one sort, called second candle. 3. White candle, in two sorts, procured from sheep nad goats. 4. Siberts soap, in three sorts: this kind is a mixture of Kalmus sheep and oxen fat. 5. Ordinary soap, in three sorts: it is chiefly derived from Kalmus sheep. Russian tallow is shipped in casks weighing from 3 to 10 jewt. goes each. The tare fluctuates from 10 to 12 per cent. The branching and taring take place on delivery for shipment.

from 10 to 12 per cent. The branching and taring take place on delivery for shipment.

TAMARIND, the fruit of the Tamarindus Indica, is a pod containing a viscid acid pulp, connected with the seeds by tough strings or fibres.

TAPIOCA, a nutritive substance prepared from the starch of the farinaceous roots of the Jatropha manihot, or casesva plant, extensively cultivated in S. America, especially Brazil. It is imported in pearl-like globules.

TAR (Fr. Goudron. Ger. Theer. Rus. Degot, Sinola shitkaja. Sw. Tjärra), a thick empyreumatic oil, of a dark-brown or black colour, obtained by burning pine and fir trees in a close smothering heap, with a channel through which the tar exudes. It is chiefly used for resisting moisture in ships and outhouses. It is largely made in Russia, from whence about 12,000 lasts are annually imported into Britain, besides nearly 2000 lasts from Sweden and the United States. The last contains 12 barrels, each of 264 lun. gallons.

into Britain, besides nearly 2000 lasts from Sweden and the United States. The last contains 12 barrels, each of 26½ Imp. gallons. S

TARE (from the Italian tarare, to abate), is a deduction from the gross weight of goods on account of the package in which they are contained: the remainder is called net weight. It is often fixed as to particular commodities by a conventional rule among merchants, in which case it is called customary tare, in contradistinction from the real tare ascertained by measurement. Trett, Draft, and

Cloff, are old allowances of the same kind, now nearly obsolete.

TARES on FITCH, a species of pulse (Vicia sativa) cultivated as herbage.

TARIFF, a table of duties payable on goods imported or exported. The British tariff has undergone great alterations since the commencement of the present century, especially in 1809, 1819, 1825, 1833, 1842, 1853, 1860, and 1861. The last, which contains numerous important reductions, will be found at the end of the present volume. See SUPPLEMENT.

TARTAR (Fr. Tartre oru, blanc et rouge. Ger. Roher Weinstein. It. Tartaro colgare), an acidulous salt which exists in the juice of the grape, and is deposited colgars), an acidulous salt which exists in the juice of the grape, and is deposited in wine-casks in the form of a crystallized incrustation, more or less thick, which is scraped off. This is crude tartar, or argol. It is either white or red according to the colour of the wine: the former is preferred, as it contains fewer impurities than the red; but the properties of both are essentially the same. When good, it is thick, hard, brittle, and brilliant, with but little earthy matter. The German or Rhenish argol is reckoned the best; after which that from Bologna. It is also brought from Florence, Naples, Sicily, and the Cape of Good Hope. It is used in hat-making, gilding, dyeing, and in the preparation of tartaric acid.

TARTAR Capua val (Fr. Capua val (Fr. Capua val varies), Grav Weinstein rahm, It. Tartare margale).

TARTAR [Chara or], [Fr. Orême de tartre. Ger. Weinstein rahm. It. Tartaro purgato), the bitartrate of potassa of chemists, is argol or crude tartar purified by solution and crystallisation. It occurs in small, irregular, gritty crystals, or in the form of a fine white powder. It has an acid harsh taste. Cream of tartar is used in medicine and the arts.

TARTARIC Acts is procured chiefly from white argol by the action of prepared chalk and sulphuric acid. The crystals formed are of considerable size, permanent, without smell or colour, and very acid to the taste. It is used in many of the arts, particularly dyeing and calico-printing; and is much employed as a cheap substitute for citric acid in lemonade and efferweeing solutions.

TAX, a portion of the produce of the capital and labour of a country, placed at the disposal of the government. Security, protection, and good order being productive of universal advantage, it is obvious no individual can complain that he is made to contribute in the same proportion to his means as others for their attain-ment. Still, like all other values, the smaller the sacrifice for which they can be obtained so much the better. Every mode by which the expenses of government can be diminished and taxation reduced is an advantage to the public, precisely of the same kind that a diminution in the cost of procuring any commodity is to an individual. Hence, the best plan of finance, says M. Say, is to spend little; and the best of all taxes the least.

The general principles which, according to Adam Smith, should regulate all taxes are the following:—lst, The subjects of every state ought to contribute towards the support of the government as nearly as possible in proportion to their respective abilities,—that is, in proportion to the revenue which they respectively enjoy under the protection of the state. 2d, The tax which each individual is

bound to pay ought to be certain and not arbitrary. The time of payment, the manner of payment, the quantity to be paid, ought all to be clear and plain to the contributor, and to every other person. 3d, Every tax ought to be levied at the time and in the manner in which it is most likely to be convenient for the contribut or to pay it. 4th, Every tax ought to be so contrived as both to take out and to keep out of the pockets of the people as little as possible over and above what it brings into the public treasury. Perhaps these principles are as just and comprehensive as they can be made; and that system of taxation is best which conforms most nearly to them.

Taxes must ultimately fall either on revenue or capital. There is perhaps no single tax which is not partly derived from each of those sources. But, assuredly, the largest proportion of all taxes, judiciously imposed, is paid out of revenue; the desire to preserve their place in society, to preserve their capitals unimpaired, and to improve their condition, stimulating most men to endeavour to discharge the burden of a moderate tax by an increase of labour or of saving. A tax, however, burden of a moderate tax by an increase of labour or of saving. A tax, however, is not necessarily a tax on capital, because it is laid on capital, or a tax on income because it is laid on income. A moderate tax laid on capital may be, and generally is, defrayed from a saving of income; while an oppressive tax laid on income has in most cases to be paid out of capital. But of all taxes those are the most injurious which necessarily fall on capital; for every such tax, by diminishing the funds destined to support productive industry, lessens the revenue of the people,—the only source from which taxes can be permanently paid; and thus lays the sure foundation of national poverty and distress.

A tax is said to be direct when it is immediately taken from income or property; and indirect, when it is immediately taken from income or property;

and indirect, when it is imposed on the articles on which the income or property is expended. All taxes are disliked, and the more directly they are imposed, the more hateful they become. Hence, in most countries, the number and amount of direct taxes are small compared with those which are levied indirectly. The latter always meet with a more cheerful acquiescence on the part of the people, being felt the least, because no formal demand is made upon them; while they can often be so wisely contrived, that the consumer shall scarcely know that he pays them. Besides, when placed upon the proper description of articles,—as luxuries,—the payment of them becomes optional. The facility, however, with which indirect taxes may be levied, renders it necessary to consider the incidence and effects of

them with peculiar caution.

If a duty be levied on a particular commodity, its price will sustain an equal rise; for if it did not, the profits of the producers would be sunk below the common level, and their business would be abandoned. But it depends on the circumstance of

and their business would be abandoned. But it depends on the circumstance of the commodity being a luxury, whether a tax on it will fall wholly on the consumer. In so far as necessaries are used by persons of property, taxes on them are also defrayed by the consumers; but, in so far as they are required by labourers, the effect of taxes on them differs in no respect from the effect of equal imposts laid directly on wages,—at least in those cases where the wages are as low as is consistent with the preservation of the number of labourers.

Taxes should be allowed to interfere as little as possible with the progress of national wealth; and it should always be an object to derive them from the results of the successful employment of capital and industry, and not to press them upon any intermediate stage of production. Hence taxes upon raw materials are objectionable. They increase the price of such materials, and thus limit the power of the manufacturer to purchase them, and to employ labour in augmenting their value; while, by increasing the price of the exported manufactures, they limit the demand for them abroad. Taxes upon home manufactures are liable to similar objections, since, by increasing the price they diminish the consumption, and consequently dissince, by increasing the price they diminish the consumption, and consequently discourage the manufactures, and the employment of labour and capital. On the other hand, luxuries are a fair subject of taxation. Taxes upon such articles do not interfere with industry or production; but care must be taken to proportion the charge in each case to the value of the commodity. Excessive duties are less productive than moderate duties; while the causes of their failure are injurious to public wealth by discouraging consumption, and to its morals, by offering an to public wealth by discouraging consumption, and to its morais, by our inducement to smuggling. Experience alone can show the precise rate at which the revenue is most productive, consistently with an unchecked consumption and an absence of contraband dealing; but it may be assumed, that whenever a tax adds very greatly to the price of an article of general consumption, it puts it out of the reach of many who are desirous to purchase it, and creates, by the chance of a large profit, a temptation to evade the payment of the duty. When a country

possesses any exclusive, natural, or acquired advantage, in the production of commodities, as Great Britain in coal, China in tea, and Russia in tallow, an export duty is perhaps the most unexceptionable of all taxes, from its falling wholly on the foreigners by whom the articles exported are bought and consumed. Care should be taken, however, not to impose such a duty on commodities which can be produced at nearly the same cost abroad, for its effect would then be to put an activate to the supplied by extending the content of the content o entire stop to their exportation, by causing the market to be supplied by others. Care must likewise be taken that the imposition of an export-duty does not pro-

voke injurious retaliation from foreign states.

The only legitimate object of taxation is revenue; but duties are often imposed on the importation of merchandise without reference to this object, and solely with the view of directing trade into particular channels. Thus protective duties are imposed for the purpose of artificially raising the price of the productions and manufactures of foreign countries, so as to restrain or prevent their competition with similar articles produced at home; and discriminating duties, or duties not levied equally upon the produce or manufactures of different countries, are imposed (in Britain now solely with reference to the colonial trade), with the view of giving an advantage to the country on whose commodities the tax is lightest as compared with others. The impolicy of all such duties has been already explained in the article COMMERCE.

TEA (Chin. Cha, Te. Du. Te. Fr. Thé. Ger. Thee. It. Te. Por. Cha. Rus. Tchai. Sp. Te), the leaf of an evergreen shrub (Thea), 3 to 6 feet in height, resembling a myrtle, and bearing a white blossom something like a wild rose. The leaves, elliptic, serrated, and alternate, are classed as black and green; but it is still uncertain whether these are obtained from one or more species, or from varieties of the same species. The plant is a native of China and Japan; it is also cultivated in Java, Assam, and other places; but at present the only commercial source of tea is China, where it is grown in almost every province except the most northerly, though the finer kinds are confined to a few localities. Formerly, all the black tea was brought from the province of Fo-kien, and the green from that of Kiangnan; but the culture of the first for exportation is now extended to Quang-tung,

nan; but the culture of the first for exportation is now extended to Quang-tung, and of the other to Tche-kiang. From these places it has hitherto been conveyed, from 400 to 700 miles, mostly by land-carriage, to Canton for shipment; but, under the late treaty with Great Britain, it will doubtless find its way to nearer ports. The plant is propagated from seeds, which are deposited in rows. The first crop of leaves is not collected until the third year; and when the trees are six or seven years old, the produce becomes so inferior that they are removed. There are commonly three gatherings of the leaves yearly,—in April, Midsummer, and August. The earliest possess the most delicate colour and aroma; leaves of the second gathering have less valuable qualities; and those last collected are of a dark colour, large, coarse, and so inferior that they are consumed only by the poorset of the natives. After being gathered, and partially dried by exposure to the sun, they are farther dried in a heated pan. They are then removed to a table where they are roiled and cooled; after which they are sifted and sorted into several varieties. The object of the drying and rolling is both to diminish the bulk and to enable the leaves to preserve their flavour.

Descalptive Table of the Frincipal Teas.

taining a larger proportion of the woody fibre than other tess; its infusion is of a darker colour, and as it has been more subjected to the action of fire, it keeps longer without becoming musty than the finer sorts. Two kinds are brought from China: the lowest called Canton bohea, is a mixture of refuse congou with a coarse tea called woping. The better kind of bohea comes from the district of that name in Fo-kien, and having been of late esteemed equally with the lower congous, has been packed in the same square chests, while the old bohea package is of an oblong shape.

2. Congou (a derivation from Koong-foo, "labour or assiduity") long formed the built of the Rast India Company's cargoes; but the quality gradually fell off; and of late the consumption of bohea has increased in this country to the diminution of congou, the standard of which has been considerably lowered. A particular variety called campoi (from Ken-pog, "selection," selection," "choice"), has ceased to be prized from the absence of strength,—a characteristic generally esteemed beyond delicacy of flavour.

3. Bouchong (from Scaou-choong, "small or scaces ort") is the finest of the word of the scions of both and the fine of the stronger black in the finest kinds of some accordingly graded in separate paper bundes of some time and the scale with flower; and they present in China, except thigh prices. An exceedingly crisped and curled leaf scalled complete and they are the label so dethem in the fine proper of the mixed with a ferruginous dust, which is more liable to injury from keeping than on yother sort.

Graen Tangel has developed the boule of the word of the the one of the consumption

DESCRIPTIVE TABLE OF THE PRINCIPAL TRAB.

BLACK TRAS.

1. Bokes is a coarse leaf, distinguished by containing a larger proportion of the woody fibre staning a larger proportion of the woody fibre stands as it has been more subjected to the action and as it has been more subjected to the action exclusively for presents. The fibre kinds of southing it keeps longer without becoming musty

twisted and rolled by hand; and, on account of the extreme care required in its preparation, the best is difficult to procure, and very expensive. 4. Gasspowder is nothing but a more carefully-picked hyson, consisting of the best rolled and roundest leaves, which gives it that granular ap-pearance whence it derives its name.

and sold as the refuse, or "akin tea," at a much lower price.

2. Hyere (corrupted from the Chinese term for "flourishing spring"), is a fine sort gathered in the early part of the season. Every leaf is twisted and rolled by hand; and, on account of Thus black teas the foot-stalk is always collected.

Thus black teas the foot-stalk is always collected. Thus black teas the foot-stalk is of the black teas the foot-stalk is always collected. while the green is exclusively the fleshy the leaf itself. Green ten is thus dearer than the extreme care required in its preparation, the best is difficult to procure, and very expensive.

4. Guspowder is nothing but a more carefully-picked hyson, consisting of the best rolled and roundest leaves, which gives it that granular appearance whence it derives its name.

5. Young Hyson, until spoiled by frandulent mixture to meet the large demand of the Americans, was a genuine delicate young lest, called green tea is more considerable than for black.

Tea must have been used in China from a remote period; but it was unknown in Europe until the beginning of the 17th century, when it was introduced by the Dutch. It was carried from Amsterdam to London. Afterwards small quantities were brought to England by the East India Company; but it did not become an object of trade with them until about 1678, when they imported 4713 lbs. In the object or trade with them until about 10/6, when they imported, the quantity consumed increased to 2,358,589 lbs.; in 1768, to 6,892,075 lbs.; in 1785, to 10,856,578 lbs.; in 1800, to 20,358,762 lbs.; and in 1835, to 31,829,619 lbs. Hitherto the East India Company had enjoyed a monopoly of the British trade, and the price of tea was in consequence much higher than in other countries: but their exclusive privileges were abolished, April 22, 1834, when the trade was thrown open, subject to the regulations of the act 3 & 4 Wm. IV. o. 101. The compatition of private privileges were abolished, April 22, 1834, when the trade was thrown open, subject to the regulations of the act 3 & 4 Wm. IV. c. 101. The competition of private traders afterwards reduced the price; and the quantity consumed in the United Kingdom increased in 1835 to 36,574,004 lbs.; and in 1836 to 49,142,286 lbs.! The war with China and distressed condition of our manufacturing population, subsequently led to a great falling off in the consumption; but in 1851 it amounted to no less than 36,396,078 lbs. From 2,000,000 to 4,000,000 lbs. are besides annually imported for re-exportation, chiefly to British America and Germany.

Tea is also largely consumed in the United States; considerable quantities are likewise used in Holland and in Russia, which last country is supplied overland by way of Kiachts. In other parts, the consumption is quite inconsiderable.

The British duties on tea have varied greatly at different periods. From 1819 to 1834, an advalorem excise duty was levied of 96 per cent, on all teas sold under 2a, per lb., and 100 per cent, on all that were sold at or above 2a per lb. In 1834, tea was removed from the excise to the customs department of the revenue, when there were imposed—on bohea, 1s. 6d. per lb.; on congon, twanksy, hyson-skin, orange pekse, and compot, 2s. 2d. per lb.; and on souchen, hyson, flowery pekse, and other kinds not enumerated, 3a, per lb. These rates ceased July 1, 1836; since which a fixed duty of 2s. Id. per lb. has been imposed on all teas.

TEAK, a large Indian tree (Tectona grandis), having a trunk erect, lofty, and

which a fixed duty of 2s. id. per lb. has been imposed on all teas.

TEAK, a large Indian tree (Tectona grundis), having a trunk erect, lofty, and of an enormous size. It has some resemblance to oak in its timber, but its quality is reckoned preferable for shipbuilding; and the country ships of India, as well as many of the vessels trading between India and this country, are constructed of it. It is easily worked, and at the same time strong and durable. Alternate exposure to a vertical sun and to the drenching rain of the wet monsoons, which would rend in pieces European oak, produce no injurious effect upon teak. Being of an oily nature, it also possesses the valuable property of preserving iron, while oak destroys it. The teak most esteemed is grown in the Ghauts. There are also extensive forests of it on the banks of the Irrawady in Birmah; and it is largely exported from Rangoon to Calcutta and other parts of India. Its quality, though inferior to that of Malabar for shipbuilding, has been found fitter for machinery.

Aprican Teak is a name improperty given to a species of timber largely imported from Sterra

AFRICAN TRAK is a name improperly given to a species of timber largely imported from Sierra Leone. Though for some purposes useful, it is destitute of several of the most valuable properties of teak, and is, in fact, the product of an entirely different tree.

of teak, and is, in fact, the product of an entirely different tree.

TEXAS. a State of N. America, between the United States and Mexico, extending from latitude 26° to 38° N., and from longitude 94° to 107° W. Area, 310,000 sq. miles. Population, 350,000. Texas is an integral not a federal republic. Texas was formerly a province of Mexico; but having been peopled chiefly by Anglo-Americans, disputes arose, and afterwards an insurrection, which resulted, April 21, 1865, in its independence, by the defeat of Santa Anna, the Mexican president, at San Jacinto. It is both a fine and a fertile country, mostly level, and well suited for the growth of cotton. Which is its agricultural staple. The grains chiefly cultivated are maise and wheat; but the rearing of live-stock forms the principal occupation, especially in the prairies. Slavery exists, and insustrial progress is mainly dependent on its continuance, as the climate is too hot and relaxing for free labour. The position of the country, however, is favourable for trade; and in exhaps for cotton and other products sent to Britain, partly by way of New Orleans, the Texians import manufactures, &c. There is also a considerable inland trade with the United States, at Santa Fe, to which

TIN

THREAD (Fr. Fil. Ger. Zwirn. Du. Garen. It. Refe. Por. Fio. Torsal. Rus. Niki), a small line, formed by twisting together fibres of flax, cotton, or silk. The various kinds used in sewing, and in making bobbin net, and some ton, or silk.

ton, or silk. The various kinds used in sewing, and in making bobbin net, and some other textile fabrics, consist of two or more years, firmly twisted together.

TILES (Fr. Tuiles. Ger. Duchsiegel), a kind of thin brick, or plate of baked clay, used chiefly for covering roofs, but occasionally also for paving floors and making drains. Down to 1833, an excise duty was levied in Britain on tiles.

TIMBER, wood adapted for house or ship building. The trade in timber is one of great extent and importance. A considerable portion of that (Oak) used in ship-building is of home-growth, but the greater portion of that (Pink) employed in house-carpentry is imported,—the sources of supply being the countries around the Baltic, especially Prussia and Norway, and our colonies in N. America. The produce of the N. of Europe is generally of excellent quality; but much of the colonial timber is very inferior. Teak is brought from Africa, mahogany from Honduras and other places, and cabinet and dye woods from a variety of quarters; but these scarcely enter into competition with the timber of N. America and the Baltic. The duty on foreign timber was, in 1787, only 6s. 8d. the load of 50 cubic feet; but it duty on foreign timber was, in 1787, only 6s. 8d. the load of 50 cubic feet; but it was gradually raised until, in 1804, it amounted to 25s. In 1810, it was raised to 54s. 8d.; and from 1814 to 1820, it was 64s. 11d. and 65s. the load. Colonial timber was admitted free until 1798, when a duty was imposed of 3 per cent. ad valorem was admitted free until 1/30, when a duty was imposed of 3 per cent. ad valorsm; but the trade in this kind scarcely existed prior to 1803, when the duty was changed to a specific rate of 2s. per load; which, however, was abolished in 1806. From this year colonial timber was admitted free until 1821, when a duty of 10s. the load was imposed, and at same time the duty on European timber reduced from 65s, to 155s, the load leaving a profession of the color o was imposed, and at same time are duty on European sinner reduced from the 55s. the load, leaving a preference duty in operation of 45s.; which system continued till 1842. These differential duties led to the substitution of the inferior timber of N. America for the superior produce of the N. of Europe. The average annual importation of N. American timber, only 16,533 loads in the five years from 1803 to 1800 1803. importation of N. American timber, only 16,533 loads in the five years from 1803 to 1807, gradually increased, until, on an average of the five years, 1829-1833, it amounted to 412,682 loads; while the importation of Baltic timber fell off in the same period from 232,477 loads to 122,783 loads. In 1841, the consumption of foreign and colonial timber in the United Kingdom, and the duty derived therefrom, were as follow:—Battens, deals, and staves, 177,058 great hundreds (120), £778,990; timber, 8 in. sq. and upwards, from British America, 613,679 loads, £337,795; do. from other parts, 131,479 loads, £370,302: making in all, of revenue, £1,487,087.

Proposals for a reduction of the timber duties were made by Earl Grey's government in 1831, and by Lord Melbourne's in 1841; but nothing was effected until 842, when the duty on colonial timber was reduced to la, per load. At same time.

1842, when the duty on colonial timber was reduced to ls. per load. At same time, foreign timber was lowered to 30s. the load; deals, 35s.; and after October 10, 1842, to 25s, and 30s, respectively. The mode of charging the duty was also improved. Formerly it was disproportionably heavy on the smallest and least valu-

proved. Formerly it was disproportionably heavy on the smallest and least valuable kinds of deals, battens, and planks; while, in measuring unsawn timber, the cubic contents were, it is alleged, over-estimated from 10 to 20 per cent.; and the sawers complained that timber partly cut up was charged proportionally lower than in the log, by which their interests were needlessly injured. S

TIN (Fr. Fer blanc. Ger. Weissblech), a white brilliant metal. Its surface is but slowly impaired by exposure to the atmosphere, nor is it oxidized even by the combined agency of air and moisture. Its malleability is very considerable. In ductility and tenacity it is inferior to several metals. It is soft and inelastic. Sp. gr. 7-2. Fusing point, 442° Fahr. It is employed, when in a liquid state, in the fabrication of a great variety of utensils. Alloyed with lead it forms pewter. It is likewise used in the process of enamelling; in silvering looking-glasses; by dyers, when solved, to heighten red colours; and for many other purposes.

Tin is rather a searce metal: it is principally found in primitive rocks, and occurs disseminated in them, and in beds, but principally in veins, mostly in a state of crystallization, being rarely compact, and is frequently accompanied by other minerals. The ore from which it is chiefly obtained is an oxide of the metal. Tin is found abundantly in Cornwall and the western part of Devonshire: it is also

is found abundantly in Cornwall and the western part of Devonshire: it is also procured in Germany, Bohemia, and Hungary, in Europe; in Chili and Mexico, in America; and in Malacca and Banca, in Asia.

Barrish Tin.—The annual produce of the tin mines and works of Cornwall is estimated at 4000 tons, worth from £65 to £80 a-ton. About 30,000 cwts. of unwrought tin are annually exported from Britain, chiefly to France, Italy, and Russia; which is exclusive of tin and pewter wares and tin plates, in declared value nearly £400,000, sent to the United States, Italy, Germany, Prance, the colonies, &c. From 10,000 to 30,000 cwts. of Banca and Malay tin are besides imported for re-exportation to the continent and the United States.

ported for re-exportation to the continent and the United States.

TINCAL. [BORAX.]

TOBACCO (Du. Tabak. Fr. Tabac. Ger. Taback. It. Tabacco. Por. & Sp. Tabaco. Rus. Tabak. Arab. Bujjerbang. Mal. Tambracoo. Chin. Sang-yen), the dried stimulating narcotic leaves of a plant indigenous to America, but extensively cultivated in the Old World,—its use, either for smoking, chewing, or snuffing, being now common in all countries. There are several species,—the principal being the Nicotiana Tabacum, grown in Virginia, the great commercial source of the "weed." It is an annual herb, raised from seeds sown in March in prepared protected beds, from which it is transplanted in May; and it attains perfection in September. It has then a stem from three to six feet in height, bearing large oblana snear-shaned leaves, which, after being gathered, and oured by fermentation

protected beds, from which it is transplanted in May; and it attains perfection in September. It has then a stem from three to six feet in height, bearing large oblong spear-shaped leaves, which, after being gathered, and oured by fermentation and drying, are ranged horizontally and pressed in the hogsheads in which they are exported; the finest, however, being generally made into a kind of rolls. Tobacco requires considerable heat to come to perfection, but with care it may be reared in temperate climates; and it is thus cultivated to a great extent in Holland, France, Prussia, and other countries, in several of which the trade is, for fiscal purposes, monopolized by the government. For a more detailed account of the rearing of tobacco, see Porter's Tropical Agriculturist.

Tobacco was introduced into Europe by the Spaniards and Portuguese, who acquired the habit of smoking from the natives of America; and it was brought to England by Raleigh and his conduced into England; in which, notwithstanding several prohibitions, it was continued until the Restoration, when, for the purposes of revenue, the exclusive supply of the bone market was secured to the American colonists; though its cultivation in Ireland was continued until a recent period. Tobacco having been always the subject of an extensive sungeling, especially before 1835, the custom-house accounts of the trade cannot be implicitly relied on. In 1847, the quantity of unmanufactured tobacco imported into the United Kingdom amounted to 38,308,611 lbs.; of manufactured and souff, 733,837 lbs.; total, 38,328,578 lbs.: of which about 19-20ths were brought from the United States, and the remainder cheigh from Cuba, Colombia, Hayti, and the East Indies. The total quantity entered for consumption in the same year was \$2,378,062 lbs.; the surplus imported being re-exported chiefly to Germany, Holland, Belgium, Spain, Portugal, Italy, west coast of Africa, and Australia.

Dealers distinguish between strip and leaf, or strip-leaf and head-cowk; the former being the

it is conveyed to the manufacturer, who communicates to it one of the three forms in which it is used—common tobacco, cigars, or smulf.

The Daty in Britain on foreign unmanufactured tobacco was in 1786 only 10d, per lb.; but in 1787 it was increased to la. 3d.; in 1796 to la. 7d.; and afterwards gradually to 4a. In 1815; which high rate was continued until 1825, when it was reduced to 3a.,—the existing rate. As the price of tobacco in bond varies from 2id. to 6d. per lb., the duty is from 600 to 1440 per cent.: the average rate is about 900 per cent. The Iriahduties were assimilated to those of Britain in 1813. The net revenue levied in the United Kingdom on the article is about £5,500,000; only one foreign

net revenue used in the United alignment of the article is about 2.5,00,000; only one foreign commodity, sugar, bringing in a larger sum.

The duty was collected both through the customs and excise until 1825, since which it has been levied wholly by the customs. A strict survey of the manufacturers was, however, maintained by the excise until 1840, when it was abolished (3 & 4 Vict. c. 18); but the smurgling and adulteration alleged to be practised, led in 1842 to a partial re-establishment of the excise surveillance by the 5 & 6 Vict. c. 33.

the 5 & 6 Viet. c. 82.

Tobacco is prohibited to be imported in vessels of less than 120 tons, or exported in those under 70 tons; and the places of import are limited to London and Liverpool (to which two nearly the whole is brought), and a few other principal ports. A charge of 2s. per hhd. is made on its being placed in the bonded warehouse, and the same when it is taken out; but no other recut is due for five years. On being re-shipped it is subject to an allowance of shrinkage from the seller to the buyer of 30 the. per hhd. on Virginias and Kentucky, and 15 be, per hhd. on Maryland, on the handing weights; the draff of the former 8 bes., and the latter 4 bes, with a tret on all sorts of 4 be. per 104 lbs. When taken out for home consumption the same allowances of draff and tret are made as for exportation, and the duty is charged on the net weight. Cuerous Rescuentrons.]

TOLU BALSAM, the concrete juice of the Myrarylon toluiferum, is of a brownish-yellow colour, transparent, with the taste and odour of the white balsam of Peru. It is imported from South America in earthenware jars or tin cases; but it is much adulterated.

is much adulterated.

TON, a British measure of weight, equal 20 cwts. or 2240 lbs. avoirdupois; in the measurement of a ship, it is reckoned at 40 cubic feet.

TONNAGE of a Ship, is properly an expression for its interior capacity by the number of tons of sea-water which it could contain; therefore, if the interior volume were found in cubic feet, on dividing that volume by 35 (the number of cubic feet of sea-water equal in weight to one ton), the quotient would be the tonnage required. In practice, however, it has been found convenient to adopt curpirical rules for finding the tonnage of ships. Prior to 1836, the established method in this country was founded on very erroneous principles. By considering the breadth and depth nearly the same, the rule implied the square of the breadth; and hence increasing the breadth of a vessel increased her nominal tonnage for the payment of dues more than it increased her real capacity. Vessels, accordingly, came to be built narrow and deep; and thus not only less efficient but highly dangerous. But this pernicious practice was abolished, and an improved system introduced, by the act 5 & 6 Wm. IV. c. 56, of which the following is an abstract:—
Vessels not propelled by stem, previous to 1 tiply these three measurements together, and,

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gerous. But this permicious practice was sholished, and an improved system introduced, by the act \$\delta\$ & 6 Mm. IV. c. 56, of which the following is an abstract:—

**Vessels not propelled by stems, previous to being registered, must be measured while the hold is clear, thus:—Divide the length of the upperdeck between the after part of the stem not the foremost, the middle, and the aftermost of those points of division, measure in feet and decimal parts of a foot the depths from the under side of the upper-deck to the ceiling at the limber strake. In the case of a break in the upper-deck, the depths are to be measured from a line stretched in a continuation of the deck. *Breadths.—Divide each of those three depths into five equal parts, and measure the inside length of the engine-room in the upper-deck of the indiship depth. *Length.—Divide each of those three most depths at one-fifth and at four-fifths from the upper-deck of the midship depth. *Length.—At half the midship depth measures the first the same division, at two-fifths of the length of the vessel from the after-part of the testm to the fore-part of the stem and the fore-part of the stem to the fore-part of the stem and the fore-part of the stem and the fore-part of the stem and th breadth, and the lower breadth at the midship division, and the upper and twice the lower breadth at the after division, for the sum of the breadths; then multiply the sum of the breadths; then multiply the sum of the breadths, and this product by the length, and divide the final product by 3500, which will give the number of tons for register. If the vessel have a poop or half-deck, or a break in the upper-deck, measure the inside mean length, breadth, and height of such part thereof as may be included within the bulkhead,—mulTONTINE a loan regised on the account of the product of the same product on the same product on the same product on the same product on the same product on the same product on the same product on the same product on the same product on the same product on the same product on the same product on the same product on the same product of the same product

sa alvore found. In open vessels, the depths are to be measured from the upper edge of the upper stake.

In stram-vessels, the tonnage due to the cubical contents of the engine-room must be deducted; the contents being ascertained thus:—
Measure the inside length of the engine-room in feet and decimal parts of a foot from the foremest to the aftermost bulkhead, then multiply the said length by the depth of the vessel at the midship division, and the product by the inside breadth at the same division, at two-fifths of the depth from the deck, taken as aforesaid, and divide the last product by \$8^**, and the quotient will be the tonnage of the engine-room.

The length of the engine-room and the tonnage due to its cubical contents must be set forth in the registry; and any alteration on them will require a new registry.

Vessels whose tonnage is required when their cargoes are on board, must be measured thus:
—Measure first the length on the upper-deck, between the after-part of the stem and the forepart of the stem-post; secondly, the inside breadth on the under side of the upper-deck, at the middle point of the length; and, thirdly, the depth from the under side of the upper-deck, at the middle point of the length; and, thirdly, the depth from the under side of the upper-deck, at the middle point of the length; and, thirdly, the depth from the under side of the upper-deck at the middle point of the length; and, thirdly, the depth from the under side of the upper-deck, at the middle point of the length; and thirdly, the depth from the under side of the upper-deck, at the middle point of the tength is multiply these three dimensions together, and divide the product by 130: the quotient will be the amount of the registered tonnage.

The amount so ascertained must be carved on the main beam of each vessel.

unities, with the benefit of survivorship.

TONTINE, a loan raised on life annuities, with the benefit of survivorship.

as may be included within the bulkhead,—mul- on the main beam of each vessel.

TONTINE, a loan raised on life annuities, with the benefit of survivorship. Thus, an annuity at a certain rate of interest is granted to a number of subscribers, who are divided into classes according to their ages; and annually the whole fund of each class is shared among its survivors, till at last it falls to one, and on his death it reverts to the party who established the tontine. The term is derived from the name of the inventor, Lorenzo Tonti, a Neapolitan.

TOPAZ, an ornamental stone, in considerable estimation. It occurs massive, in rounded pieces, and crystallized in prisms. Sp. gr. 35. It is sometimes limpid and nearly transparent, or of various shades of yellow, green, blue, or red, and translucent. It becomes electric by heat, with polarity. Topaz occurs chiefly in Minas Novas in Brazil, and the Ural Mountains; but it is also found in the German tin mines, the Mourne Mountains in Ireland, and Cairngorm in Aberdeenshire.

TORTOISE-SHELL (Malay, Sisik kurakura), the scales of the tortoise; used for combs, snuffboxes, spectacles, as well as for inlaying and various other works. There are several kinds both of land and marine tortoises, but the shell of commerce is usually obtained from a marine species found within the tropics, called the caretta or hawksbill tortoise, the Testudo imbricata of Linnaus. Tortoise-shell abounds in the seas of the Indian Archipelago; and it is imported extensively from Singapore. An inferior kind is brought from the West Indies.

TOYS (Du. Spesigoed. Fr. Jousts, Bimbelots. Ger. Spielseug, Speilsachen. It. Trastulli), children's playthings, baubles, and trifling ornaments of all sorts. These articles form, in this country, the subject of an immense commerce. Birmingham, denominated by Burke "the toyshop of Europe," is the chief seat of the manufacture of metallic ornaments, trinkets, and bijouterie; and an almost infinite variety of toys are made in London and other cities throughout the king-

infinite variety of toys are made in London and other cities throughout the king-

dom; besides which, considerable quantities are imported from Holland, Germany, TRADE. [Commence.]
TRADE. TRAD

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of their signal importance in commerce.

of their signal importance in commerce.

In those parts of the Atlantic and Pacific Cosans which are remote from the influence of the land, between the limits of about 25° or 30° N. and S. latitude, there is a constant easterly wind. On the north side of the equator it blows from between the north and the east, and on the south side from between the south and the east, inclining more to the north and south-according to the distance from the equator; these winds are denominated the N.E. and S.E. trade-winds; and are produced by a modification of the currents of cold air flowing from the poles to the equator, caused by the rotation of the earth on its axis. The direction and extent of the trade-winds vary with the season of the year; and in some parts of the world their course is entirely altered. The most remarkable of these modifications of the trade-winds are the Indian Monsoova.

TER ACCAN TELL OF CLUMENT ACCAN are well as the season of the season of the trade-winds are the Indian Monsoova.

remarkable of these modifications of the trade-winds are the Indian Monsoons.

TRAGACANTH, or GUM-DRAGON, a gum produced by a species of Astragalus growing in Persia and Turkey. It is more costly, and extremely different in many of its properties from gum-arabic. The finest kind occurs in twisted, vermicular, rounded or elongated pieces, almost transparent, whitish, brittle, in odorous, with a slightly bitter taste. It is also found in large tears, of a vermicular form, a reddish colour, and mixed with impurities. It is used in topical dyeing, and in pharmacy for making nowders into treebes

and in pharmacy for making powders into troches.

TREACLE, the viscid brown syrup which drains from sugar when refining

TREACLE, the viscid brown syrup which drains from sugar when refining. TRET, a deduction of 4 lbs. for every 104 lbs. from the weight of goods for dust, &c. TRIPOLI, the most easterly of the Barbary States, consists chiefly of a line of coast, extending about 800 miles along the Mediterranean, from Cape Razatin to Port Bomba. Population, 660,000. It is nominally a dependency of the Porte. For a few miles inland, the country is of exuberant fertility, but beyond this the interior consists either of sandy deserts, or of the barren mountainous districts of Gavian and Messiata. The coast tract produces in iuxuriance many articles peculiar to the finest tropical climates, and corn is raised in abundance. The date forms the staple of the interior and sandy districts. Tripoli, the capital and chief port, is situated on a neck of land projecting a short distance into he sea, in iat. 23°53' N. long. 13°11' E. Pop. 25,000. Exports, wool, drugs, mader roots, barrila, hides, goat and sheep skins dressed, salt, trona, ostrich feathers, gold-dust, ivory, gum, dried fruits and dates, lottus-beans, cassol-veners, affron, bullocks, sheep, and poulty. Imports, manufactured goods, colontals, timber, and naval stores. The principal intercourse is with the Levant, Malta, and Tunis. S
TRIPOLI, an earthy substance used in polishing hard bodies.

Malta, and Tunia. B
TRIPOLI, an earthy substance used in polishing hard bodies.
TROY, a term applied to the English weight for the precious metals. [Measures.]
TRUCK SYSTEM, a name given to the practice of paying workmen in goods instead of money. Though attended with some advantages, it was found to be susceptible of very great abuses. It was accordingly prohibited under penalties by 1 & 2 Wm. IV. c. 32.

TRUCK SYSTEM Adjusts subtaverness fungus (Tables ciberium), extermed as an

by 1 & 2 Wm. IV. c. 32.

TRUFFLE, a delicate subterranean fungus (Tuber cibarium), esteemed as an article of diet. It is imported from France and Italy.

TUNIS, one of the Barbary States, lies betwixt Algiers on the W. and Tripoli on the E. Area, 72,000 sq. miles. Population, 2,000,000. The monarch, or bey, possesses absolute power, and is now independent of the Porte. S

This state is composed chiefly of a large peninsula, stretching into the Mediterranean to within less than 100 miles of Bicily. The climate is fine, and the soil fertile, except when the usual rains are withheld. All the coast is capable of bearing cotton, sugar, and apices. Indigo and silk might also be procured with a little care. The mountains near the capital contain silver, copper, and lead, and near Porto Farina there is one of quicksilver; but the mines are not worked.

Tunts, the capital and chief port, is an irregularly built and dirty town, in lat. 35' 48' N., long. 10' 16' E. Pop. 120,000. The staple exports are olive-oil, wool, red cape, grain, hides, gold-dust, ivory, sponges, tunny fish, wax, and soap, the whole amounting annually to about £370,000. The imports are woollens, cottons, linens, with coffee, spices, sugar, metals, silk, wine, &c. The government monopolises the trade in many articles; as tobacco, wax, wool, and provisions, which it farms out to individuals. The chief intercourse is with Marseilles. With Britain there is little trade, except through the medium of Gibraltar and Maits.

TUNNY, a large fish (Thynnus vulgaris) belonging to the mackerel tribe,—the

TUNNY, a large fish (Thynnus vulgaris) belonging to the mackerel tribe,—the

object of important fisheries in the Mediterranean.

TURBOT, a flat fish (Rhombus maximus), weighing generally from 5 to 10 lbs., taken on nearly all the coasts of Britain, but principally off Scarborough. It is in

season from May to Michaelmas

TURKEY, OR THE OTTOMAN EMPIRE, embraces-lst, European Turkey, which, including the dependencies of Wallachia, Moldavia, and Servia, comprises, excepting Greece, almost the whole of the great easterly peninsula of S. Europe, extending from lat. 39° to 48½° N., and from long. 15½° to 29° E. Area, 210,000 sq. miles; population, 11,000,000. 2d, Asiatic Turkey, comprising Asia Minor, the adjacent islands, the greater part of Armenia and Kurdistan, with Syria and Palestine, Mesopotamia, and a portion of Arabia. Area, 437,000 sq. miles; pop. 10,000,000. The empire likewise includes Egypt and other African districts; but these are now merely nominal dependencies. Government, despotio, but tempered by the laws of the Koran. S

Palestine, Mesopotamia, and a portion of Arabia. Area, 457,000 sq. miles; pop. 10,000,000. The empire likewise includes Egypt and other African districts; but these are now merely nominal dependencies. Government, despotio, but tempered by the laws of the Koran. S.

European Turkey may be considered a mountainous country, though it has some very attentive plains,—the principal being that comprising Wallachia, Moldavia, and Bulgaria; considerable portions of Thrace, Macedonia, and Thessaly are also level. The country generally is well watered by the Danube, Save, and other rivers. Asia Minor consists chiefly of an attentive table-land, traveted from W. 50. aby and those attentive plants are consistent of the country generally is well watered by the Danube, and the state of the country generally is well watered by the Danube, and the state of the country generally is well watered by the Danube of Country and Spain under the same latitude; and that of Asiatic Turkey is lamost equally variable. The relative temperature of the different divisions is best indicated by their vegetable products. In Croatia, Boenia, and the adjoining provinces of European Turkey, the mountain are covered with oak and dan; ft. of the Balkan, the country theodes erost of vegenary, except and plane the state of the country of the cou

MEASURES, WEIGHTS, MONEY, &c.

Measures and Weights.—The pik or ell is of two kinds; the greater pik, called halebi or archim, used in the measurement of silks and woollens, = 37-90 Imp. inches; the lesser pik, termed endase, used in the measurement of silks and the measurement of ottons and carpets, = 37-96 Imp. inches; but gallons; the almude of oil weights 8 okes.

The fortin, corn measure, of 4 killows, = 3.84 mp. bushels; and 100 killows = 12 Imp. quar-Imp. bushel ters nearly.

Imp. bushels; and 100 killows = 12 Imp. quarters nearly.

The oka of 4 chequees, or 400 drams, = 19800 troy grains = 2 lbs. 13 oz. 44 drams avordupois; the cantar or quintal of 44 okes, or 100 rottoil, = 13446 lbs. avoirdupois.

Gold, silver, and precious stones, are weighed by the chequee, = 4850 troy grains: the chequee is divided into 100 drams, each of 16 karas, or 64 grains; the dram = 49½ troy grains: and 1½ dram = 1 metical = 74½ troy grains = 32 drams avoirdupois nearly. The finences of gold is expressed by dividing the unit of reference into 34 carass, each of 4 grains: the finences of silver by dividing it into 100 carats, each of 4 grains.

The preceding are the Constantinople weights; but in 8 myrna, 100 killows = 17½ Imp. quarters; 2 killows of 8 myrna = 3 killows of 6 constantinople nearly. The cantar or quintal is 7½ batmans, 45 okes, 100 rottoil, or 18000 drams, = 137.29 lbs. avoird. In other respects as above.

The batman of Persian silk is 6 okes; the quintal of cotton yarn, 45 okes; the taffee of Brussa silk, 610 drams; the chequee of goatwool, 800 drams; the chequee of goatwool, 800 drams; the chequee of polum, 250 drams.

Money.—Accounts are stated in plastres (gruech) of 40 paras, each para consisting of 23 good or 3 current aspers. The rate of exchange TURMERIC, the dried roots or bulbs

is very variable, on account of the continued debasement of the coin. In 1810, £1 was worth only 12 piastres; but in 1839 it was equivalent to 104, and in 1842 to nearly 199 phastres. The common or allver purse (kerr) is 800 piastres; the gold purse (kerr) is 800 piastres; the gold purse (kerr) is 7000 piastres; the half is 2 common purses, or 1000 piastres. No regular system of coinage exists at present in Turkey. And bills and prices are generally reckoned by European merchants according to the rates borne by foreign coins, particularly Spanish and German dollars.

Bills on London are commonly drawn at 61 days sight; on other places, 31 days sight. No uniform custom prevails as to days of grace.

A Treaty between Britain and Turkey in 1838 engages the Ports "to abolish all monopolies of agricultural produce, or of any other articles whatsoever, as well as all permits from the local governors, either for the purchase of any article, or its removal from one place to another when purchased." It allows British merchants to purchase, export, or re-sell all kinds of merchandles; and other wovers are exitted to exhandles. purchased." It allows British merchants to purchase, export, or re-sell all kinds of mer-chandise; and other powers are entitled to esta-blish their trade on the same basis. The duties it fixes are 3 per cent. ad valorem on all goods imported or exported, and they are to be subject to a septennial revision.

TURMERIC, the dried roots or bulbs of a tropical plant (Curcuma longa), are about the size of a pigeon's egg—oblong, tough, externally grayish, internally of a deep yellow colour, with an aromatic smell and a bitterish aorid taste. Our supplies are brought from Bengal, Java, and China: of these the Chinese is the best. Turmeric, after being imported, is reduced to a powder, which is used in dyeing

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Turmeric, after being imported, is reduced to a powder, which is used in dyeing and in medicine; also as a seasoning, being an ingredient in curry. S TURNSOLE, a blue dye, obtained from a lichen found in the Canaries. TURPENTINE (Fr. Tertbenthine. Ger. Turpentin. It. Trementina), a name for several resinous juices of trees, chiefly of the pine tribe. These juices agree in most of their properties, being originally fluid and transparent, of a strong and rather pleasant odour, and a pungent taste; inflammable and soluble in oils, alcohol, and ether, but not in water. When distilled, they yield an essential oil, called oil or spirit of turpentine, and a solid matter, called rosin, is left in the still. The priucipal varieties are—1. Common turpentine, derived from the Pisus sylvestris, and largely imported from the United States. 2. Venice turpentine, from the P. larix, or larch tree. 3. Chio turpentine, from the Pistacia terebinthus, and imported from Chio, Cyprus, and the Greek Archipelago. Turpentine is largely employed in the arts, especially in painting and varnishing; also in medicine and surgery. S

ployed in the arts, especially in painting state variables, some species of which, especially the green turtle, found on the coasts of almost all the islands and continents of the torrid zone, are highly prized as food. They abound particularly in the Cayman Isles, in the West Indies, from whence they are imported.

TUSCANY, an Italian grand-duchy, lying on the N.W., between the Apennines and the Mediterranean, separating the Papal States and Lucca. Area, including Elba, &c., 8381 sq. miles. Population in 1836, 1,436,780. Capital, Florence, an inland city, pop. 97,548. Government, an absolute monarchy.

an inland city, pop. 97,548. Government, an absolute monarchy. Set A considerable portion of the territory is occupied with branches of the Apennines; while from Leghorn to the S. frontier, the maritime district, called the Migremma, once full of flourishing cities, is now a pestilential desert. The finest part is the broad and fertile vale of the Arno, extending from Florence to Piss. About one-third of Tuscany is planted with vines and olives, or cultivated as arable land, and nearly two-thirds consist of forests or plantations of chesnuts, and neature-ground. The corr raised is insufficient for the consumption. The chief productions for export are oil, slik, fruit, lamb and kid skins, potash, timber, cork, marble and alabaster, iron from Siba, borax, alum, and anchovies fished on the coast; a little wine; with straw-plat, woollen cape, coral articles, and some other manufactures. Trade is mostly concentrated at Leghorn or Livorno, the chief commercial emporium of Italy, situated in lat. 45° 37° N., long. 10° 17° E., I miles from Pisa, and 45 from Florence, to which a railway is in trogress. Pop. 75,000, including numerous English. The town is neat; and the harbour is tolerably spacious, but not sufficiently deep for large vossels, which lie in the roads, where there is good anchorage. There are three laxarettos, and extensive warehouses in porto franco. The chief imports are corn from the Black Sea, Franch woollens, English cottons, hardware, salt-faih, and colonial articles, especially sugar from Havana and Brazil, coffee, and spices. The exports, besides the native products already noticed, include the re-shipment of Black Sea wheat, and many of the other imports.

The transit-trade of Leghorn, particularly with the Levant and Black 8-a, is less considerable than formerly; but the very low charges of the port, and the facilities afforded by its warehouses and laxarettes, within which last ships may be unladen without being detained to perform quarantine, enable it still to preserve a very important share of this trade. In 1838, 3589 vessels entered the port, including 196 British, in burden 29,307 tons. The yearly exports are estimated at from £1,500,000 to £2,000,000.

MEASURES, WEIGHTS, MONEY, &c.

gaus.: une soma is y barili, and the cogna 10.

The stajo, corn-measure, of 2 mine, = 2-676

Imp. pecks; and 100 staja = 66. Imp. bushels:
the sacca of 3 staja = 2 imp. bushels; and the
moggio of 24 staja = 2 imp. pushers nearly.

The Tuscan pound of 13 ounces, 96 drams,

TVDE = 1.500.

Measures and Weights.—The braccio of 20 soldi = 32-979 imp. inches, and 100 braccia = 63-63 imp. yards; the passetto is 2 braccia, and the canna 6. The Tuscan mile = 2833 braccia. The sacato, land-measure, of 10 stagoli, = 5228 imp. square yards.

The baril, wine measure, of 20 fiasci, = 10-03 imp. square yards.

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The baril, wine measure, of 20 fiasci, = 10-03 imp. square yards.

The pails; the oil baril of 16 fiasci, = 7-38 imp. square yards.

The saca, or or measure, of 2 mine, = 2-676 imp. pecks; and 100 staja = 66-ft imp. bushels: the secace of 3 staja = 2 imp. bushels: the meggio of 24 staja = 2 imp. puarters nearly.

The Tuscan pound of 13 ounces, 96 drams, TYPE. a piece of metal. generally as alloy of lead with regulus of antimony on alloy of lead with regulus of antimony on alloy of lead with regulus of antimony on alloy of lead with regulus of antimony on alloy of lead with regulus of antimony on alloy of lead with regulus of antimony on alloy of lead with regulus of antimony.

Type, a piece of metal, generally an alloy of lead with regulus of antimony, on one end of which, called the face, is cast the figure of a letter or other character used in printing. There are a great variety of sizes. The quantity of each usually required is called a fount, and is purchased by the pound weight. A fount comprehends a certain proportion of capital, small capital, Roman and Italic letters, with points, numerals, &c. Letter-founding was invented in Germany in the 15th century. In the reign of Anne most of our type was imported from Holland; but after 1720, the improvements of William Caslon of London rendered the English types superior to any in Europe. The art is still extensively pursued in the metropolis; also in Edinburgh, where it has attained the greatest perfection.

ULLAGE, in Gauging, what a cask wants of being full.

UMBRELLA (Fr. Parapluse), a well-known article, employed as a covering against rain; a smaller kind—the parasol—being also used by ladies as a protection from the sun. Both are of Asiatic origin, where they are used entirely for the latter purpose; and were introduced into this country by way of Italy in the early part of last century. In Europe, such coverings are used by almost all classes; but in the East their use is confined to the highest, whose rank also they sometimes denote. They are extensively made in Birmingham, London, and other cities in this country. The finer kinds are covered with silk; and the commoner with a peculiar kind of cotton cloth, largely manufactured in Perth and Carlisle.

UNITED KINGDOM OF GREAT BRITAIN AND IRELAND, the nucleus of the wealth and power of the British empire, consists of two large islands, situa-

UNITED KINGDOM OF GREAT BRITAIN AND IRELAND, the nucleus of the wealth and power of the British empire, consists of two large islands, situated in the N. Atlantic Ocean, off the W. shores of Continental Europe, between lat. 50° and 59° N., and long. 2° E. and 11° W., and numerous smaller islands adjoining thereto. Area, 121,853 sq. miles. Population in 1841,—England and Wales, 15,911,725; Scotland, 2620,610; Ireland, 8,179,359; total, 26,711,694. Capital, London, in lat. 51° 30′ N., long. 0° 5′ W. Pop. 1,870,727. Government, a constitutional monarchy; with a parliament consisting of a House of Lords made up (excluding minors) of 417 hereditary peers and 30 bishops, and a House of Commons of 658 representatives, chosen by about 996,000 electors qualified by holding a certain amount of property.

All the departments of British industry and production having received prominent attention in the different articles of the present work, we deem it unnecessary in this place to do more than give a summary of the most recent commercial and financial tables issued by the government.

IMPORTS and EXPORTS of the UNITED KINGDOM.

Yours	1	Of	Declared Value of			
Ending Jan. 5.	Official Value of Imports.	British Produce and Manufactures.	Fereign and Co'o- nial Merchandise.	Total Exports.	British Produce and Manufactures.	
1841* 1849 1843	£67,432,964 64,377,962 65,204,729	£102,705,372 102,190,517 100,260,101	£13,774,306 14,723,151 13,584,158	£116,479,678 116,903,668 113,844,259	£51,406,430 51,634,623 47,381,023	

^{*} For preceding years see the article Communes.

Quantities of the Pri and Colonial Me Home C	ncipal Article rchandise ente consumption.	of Foreign red for	Declared Value of Pr and Irish Produc Ex	incipal Article e and Manufi ported.	es of British actures
	Years to J	anuary 5,		Years to J	anuary 5,
	1841.	1849.		1841.	1842.
Bark	640,714 949,972	505,893 251,255	Apparel £ Arms, ammunition	632,844 332,101	582,848 343,776
Cheese	220,478	948,335	Beef, pork, &c	288,719	128,091
Coffee	28,723,735	28,420,980	Beer, ale	422,222	360,420
Corn: Wheat qrs.	2,024,848	2,300,888	Books	147.331	141,866
Other kindsqrs.	1,442,378	649,484	Brass and copper	1,450,464	1,523,744
Flourcut.	1,317,815	1,214,290	Butter, cheese	266,334	223,863
Cotton wool: United Stateslbs.	453.016.218	353,353,983	Cabinet wares	78,124 576,520	76,548 675,288
Rast Indieslbs.	51,931,188	59,667,420	Cordage	163,521	130,415
Brasil	13,952,644	14,095,987	Cotton manufactures	17,567,310	16,232,510
Other places lbs.	12,297,659	13,180,411	Cotton yarn	7,101,308	7,266,968
Dyes: Indigolbs.	3,011,990	2,809,195	Earthenware	573,184	600,760
Lac	649,943	765, 894	Fish	262,492	197,989
Flax & Hempcut.	1,998,583	1,998,898	Glass	417,177	421,936
Hidescot.	304,509 423,126	456,222 402,422	Haberdashery	575,843	635,127
Molaseescut.	1.989.466	1,339,646	Hardwares Hats.	1,349,137 143,485	1,623,961 125,402
Oil, olive gals. Train &Sperm tuns	24.503	23,717	Horses.	85,446	149,688
Pepper	9.749.637	2.750,798	Iron, steel	2.524.840	2,877,278
Quicksilverlbs.	331,649	303,479	Lead and shot	237,312	242,334
Ricecut.	216,097	245,887	Leather, saddlery	417,074	432,775
Rice in huskbush.	353,844	374,135	Linen manufactures.	3,306,068	3,347,555
Baltpetre cvol.	325,492	368,175	Linen yarn	822,876	979,466
Seeds: Clovercut.	141,304 3,292,964	81,909	Machinery	593,064	551,361
Flax & lint bush. Silk. Raw. &c lbs.	4,885,475	2,764,250 5,046,870	Oil, linseed, &c Painters' colours	105,937 2 06,356	114,619 185,902
Boirits: Rum gals.	2,510,668	2.278.861	Plate, jewellery	204,427	214,126
Brandy gals.	1.108.773	1,165,137	Salt	213,479	175,615
Sugar cut.	3,604,450	4.065.714	Silk manufactures	792,648	788,894
Tallowcut.	1,118,397	1,243,112	Soap, candles	450,640	342,620
Tes	32,962,905	36,396,078	Stationery	282,403	274,544
Timber : foreign			Sugar, refined	440,893	548.336
loads		131,468	Tin wares, &c	499,603 356,021	477.195
Colonialloads Battens, deals,	039,030	614,057	Wool	5,327,853	584,828 5,748,673
staveshund.	190,268	177,032	Woollen varn	452.957	552,148
Tobacco/bs.	23,096,281	22,308,385	Other articles	1.738.378	1.762,154
Winegals.	6.840.537	6,460,018			
Wool, Sheep's Rbs.	49,809,502	53,020,067	Total,£	51,406,430	51,634,623

DECLARED VALUE of the Produce and Manufactures of the United Kingdom Exported to different Countries in each of the Years 1840 and 1841.

Countries.	1840.	1841.	Countries.	1840.	1841.
Russia£	1,602,742	1,607,175	Mauritius £	325,812	340,140
Sweden	119,425	197,813	E. I. Co.'s Territories		
Norway	78,016	117,938	and Ceylon	6.023,192	5.595,000
Denmark	201,462	191,481	China	524,198	862,570
Prussia	219,345	363,821	Sumatra, Java	349,521	285,514
Germany	5,408,499	5.654,033	Philippines	395,463	84,419
Holland	8,416,190	3,610,877	Australia, Van Die-	,	0.,
Belgium	880,286	1,066,040	men's Land	2.004.385	1,969,381
France	2,378,149	2,902,002	New Zealand, &c	47,240	67,275
Portugal Proper	1,110,244	1,036,212	British America	2,847,913	2,947,(6)
Asores	44,743	38,280	West Indies	3,574,970	2,504,004
Madeira	33,157	24,608	Hayti	251,979	169,142
Spain	404,252	413,849	Other Foreign W. I.	201,010	1
Canaries	45.872	49,738	Islands	863,520	895,441
Gibraltar	1,111,176	1,053,367	United States	5,283,020	7,098,649
Italy& Italian Islands	2,660,338	2,578,697	Texas	0,200,020	6,767
Malta	166,545	223,734	Mexico	465,330	434,901
Ionian Islands	89,304	119,523	Guatemala	2,373	21,265
Turkey and Contin-	00,201	***************************************	Colombia	359,743	158,972
ental Greece	1,138,559	1,220,261	Brazil	2,625,853	2,556,554
Mores and Greek	1,100,000	1,240,801	La Plata States	614.047	989.362
Islands	25,827	34.684	Chili	1.334.870	438,089
Syria	223,033	427,093	Peru	799,991	536,046
Egypt	79,063	238,486	Channel Isles & Man	357,214	350,407
Barbary	63,904	44,126	Other Places	16,546	14,491
W. Coast of Africa	492,128		Velice & 140C00	10,040	14,451
Cape of Good Hope.		410,798	Total C	E1 400 490	E1 621 C32
Cahe or crood trobe "	417,091	384,574	, 10tm,	51,406,430	01.034.02

Public Revenue in 1839, 1840, and 1841, and Expenditure in 1841.

	Y==	ro ended Janus	ey 6,	Expenditure	Expenditure			
BEVENUS.	1940.	1841.	1848.	In the Year ended January 5,	1842.			
				COLLECTION OF REVENUE. £				
CUSTOMS EXCISE.	£ 1,341,821	1,290,581	£ 1,361,453	Preventive Service	561,990			
Spirits Foreign	1,273,630		1,063,087	Total	2,794,046			
l (British	5,449,478	5,201,664	5,178,175	PUBLIC DERT.				
Malt	4,845,949	4,983,602	5,263,363	Interest of Permanent Debt				
Hops	280,079	341,440	69,055	Terminable Annuities	4,076,776			
Wine				Management	135,669 896,465			
Sugar, molasses Tea	4,827,019		5,307,675					
Coffee	3,658,800 779,115	921,552	3,973,668 887,723	Total	29,442,262			
Tobacco, snuff	3,495,687	3,588,192	3,550,825	CIVIL GOVERNMENT.				
Butter, cheese	318,297	375,256		Royal Household	371,810			
Currants, raisins		339,880	410,827	Branches of Royal Family	318,000			
Corn	1,098,778		568,341	Lord-Lieut. of Ireland's Estab	32,465 122,717			
Cotton and wool	559,679			Houses of Parliament	498,551			
Silk		24(),628 583,962		Miscellaneous Annuities				
Soap			815,864	Pensions' Civil List	4,022			
Candles, tallow	182,000			Total				
Glass	718,348				-,,000,001			
Bricks, tiles, slates	463,426		443.018	JUSTICE Courts of Justice	533,761			
Timber				Police & Criminal Prosecutions.	571,805			
Auctions Excise Licences	298,404	316,246		Correction.	497,060			
Post Horses	1,028,685 228,251		1,036,582		1,602,626			
Sundries	1,617,985	216,636 1,674,395	199,864 1,661,591	Total	1,002,020			
	37,911,506			DIPLOMATIC.	105 200			
	37,811,000	36,12/,406	38,118,222	Ministers' Salaries and Pensions.	185,770 128,890			
STAMPS.	1 000 000	1 710 700		Consuls' Salaries and Pensions Disbursements, Outfit, &c	36,671			
Deeds, &c Probates,Legacies	1,699,283 2,017,686	1,710,533 2,098,078	1,665,297 2,132,473					
Marine Insurance		299,398	284,496	Total	351,331			
Fire Insurance		944,321	964,146	PORCES.				
Bills, Notes	781,629	773,114	743,319	Army { Effective (92,630*) Non-effective (86,26-)	3,971,425			
Newspapers	238,394	944,416	245,866	(Non-enective (86,26-1)	2,446,996 5,103,358			
Advertisements		131,590	131,605	Navy Effective (40,273) Non-effective (22,447)	1,385,716			
Stage coaches Receipts	497,216 173,047	438,047 175,070		Ord- Effective (9531)	1,655,393			
Sundries	469,001	473,256			159,739			
Total	7,217,265	7,287,823	7,276,360	Total	14,722,627			
	.,,	,,00,,020	*,2,0,000	Chinese Expedition	400,000			
TAXES. Land Taxes	1,174,100	1,181,283	1,214,431					
Windows	1.298.622	1,404,642		Public Works	356,424			
Servants	201,482	216,823	215,844	Public Warehouses, &c	121,326			
Horses	384,286	416,170	464,599	Colonial Charges	239,122			
Carriages		481,499	414,676	Remun. for Bervices, Losses, &c.				
Dogs	159,852	170,951	172,190	Special and Temporary Objects Charitable Institutions	119,531 159,738			
Add 10 per cent	000 000	000 000	311,357	Education, Science, and Art	276,716			
Miscellaneous	266,880	280,919		Permanent Charges	462,887			
Totals	3,932,689		4,715,358	Abolition of Slavery	122,425			
POST-OFFICE	2,390,764	1,342,604	1,495,540	Post-office	931,372			
CROWN LANDS	357,815		438,298	Payments from Crown Lands				
Other Receipts	248,310			Other Charges	242,814			
In all	52,058,349	51,693,510	52,315,433	In all	54,465,318			

CUSTOMS DUTY Collected at the Principal Ports in 1841.

England.	<u></u>	England.	2	Scotland.	4	Ireland.	£
London		Chester					977,718
Liverpool	4.140.593	Southampton	72.969	Glasgow	526,100	Belfast	372,792
Bristol	1,045,800	Yarmouth	69,726	Greenock	423,535	Cork	263,364
Hull	719,194	Sunderland	67.205	Port-Glasgow	100.827	Waterford	168,359
Newcastle		Lynn	64,389	Aberdeen	78,126	Limerick	170,552
Gloucester	123,688	Portsmouth	62,227	Dundee	48.138	Londonderry.	108.507
Plymouth	126,727	Goole					
Whitehaven	86,299	Truro	44,129	Grangemouth	20.692	Bligo	36,627
Stockton		Rochester				Galway	

^{*} Exclusive of Queen's troops paid by the East India Company.

UNITED STATES OF N. AMERICA, a confederacy of democratic republics which claims the portion of that continent extending from the Atlantic on the E. to the Pacific on the W., and from British America on the N. to Mexico, Texas, and the Gulf of Mexico on the S.; but the settled part is nearly confined to the region lying between lat. 29° and 47° N., and long. 67° and 95° W., which is divided into 26 states, 3 "territories" (or half-formed states), and a federal district. It into 26 states, 3 "territories" (or half-formed states), and a federal district. It has an area of about 2,000,000 square miles, and a population (1840) of 17,063,853, including 2,487,355 negro slaves in the S. states; but excluding about 200,000 Indian aborigines. Capital, Washington, pop. 23,364. The federal government comprehends a president, the executive head, appointed for four years by electoral colleges, and a congress composed of two legislatures for fix years and a house of 200 nemperaturities elected for two years by the people. of 233 representatives, elected for two years by the people. S

colleges, and a congress composed of two legislative chambers,—a senate made up of two members chosen by each of the state legislatures for six years, and a house of 233 representatives, elected for two years by the people. \$\frac{3}{2}\$

The Physical Geography of this immense country presents various distinct features. Two principal chains of mountains intersect it from N. to 8; on the W. the Rocky Mountains, a prolongation of the Mexican Cordillers, 8000 feet in mean height, which run nearly parallel to the Pacific coast at the distance of several hundred miles; and on the E. the Alleghany Mountains, about 200 feet in mean height, which run nearly parallel to the Atlantic coast, at a distance varying from Pacific region, watered by the Holland rever; the Rastern or Atlantic region, watered by the Holland rever; the Rastern or Atlantic region, and the Missouri. The Atlantic region, thereof by the Ariver and its mighty tributaries the Ohio and the Missouri. The Atlantic region, the first settled, is the most populous and improved portion, but not the most favoured as to soil and climate. From the Alleghanies to the Missistippit the country is mechanism of the Children of the Chil

gation of the Hudson, Ohio, Mississippi, and other rivers, and of the great lakes which separate the States from Canada; and also by the numerous canals and railways by which these and the Atlantic ports and populous districts are connected. These public works, partly formed by joint-stock companies, and partly state undertakings, want the finish and durability of those of Britain, but some are of great extent,—as the Eric Canal, 385 miles in length, joining Lake Ontario and the Hudson, and the railway connecting the Ohio with the Delaware. In 1838, the canals in operation afforded 3026 miles of artificial inland navigation; and the total mileage of railways chartered in 1840 was 3378, of which 3430 were open, and traversed by 475 locomotives. The roads, however, excepting those in New England, and a national one 700 miles in length, from Baltimore to St Louis on the Mississippl, are very indifferent; in many parts being mere forest tracks.

The External Commerce and navigation of the United States exceeds that of any other nation of the world,—Great Britain alone excepted. Her staple export is cotton wool, the shipment of which in 1841 was estimated in the public accounts at \$54,830,341, being in value more than one-half of the whole domestic exports of the Union. The chief other articles of that year were tobacco, \$12,876,703; flour, \$7,759,646; rice, \$2,010,107; other grain, \$6,967,799; pork, bacon, beef, &c., \$4,360,180; lumber, naval stores, and ashes, \$6,963,861; produce of fisheries, \$2,846,861; cotton manufactures, \$3,132,246; other manufactures, \$6,963,617; the whole making, with unenumerated articles, and \$2,746,486 of coin, \$100,838,732. The cotton is sent chiefly to Britain, France, and Germany; tobacco principally to Britain and Holland; the flour and provisions partly to Europe, but chiefly to Brazil and the West Indies, which are also the great marts for lumber.

The importaer made up of cottons, woollens, linens, hardware, earthenware, and other manufactures from Britain; silks and wines from Fr

northern states.

Progress of the Exports and Imports for a Series of Years.

	1835.	1836.	1837.	1838.	1839.	1840.	1841.
Exports. Domestic							
Foreign		21,746,360 128,663,040					
		189,980,035					

The following Table shows the Population of the several States and Territories according to the Census of 1840, and their IMPORTS and EXPORTS in 1841.

	Pop.	Imports.	Exports.		Pop.	Imports.	Exports.
Atlantic States.		Dollars.	Dollars.	Western States.		Dollars	Dollars.
Maine	501,793	700,961	1,091,565	Ohio	1,519,467	11,318	793,114
NewHampshire	284,574	73,701	10,348	Michigan	212,267	137,800	88,529
Vermont	291,948	246,739	277,987	Indiana	685,866		****
Massachusetts	737,699	20,318,003		Illinois			
Rhode Island	108,830			Missouri			
Connecticut	309,978			Kentucky	779,828		
New York	2,428,921	75,713,426	33,139,833	Tennessee			
		10,346,698	5,152,501	Arkansas			
New Jersey	373,306	2,315	19,166	Alabama	590,756	530,819	10,981,271
Delaware	78,085	3,276	38,585	Mississippi	375,651		
Maryland	470,019	6,101,313	4,947,166	Louisiana	352,411	10,256,350	34,387,483
Columbia, F. D.	43,712	77,263	769,331		1.00	1	
Virginia	1,239,797	377,237	5,630,286	Florida	54,477	145,181	36,629
N. Carolina	753,419	220,360	383,056	Wisconsin	30,945	****	
S. Carolina	594,398	1,557,431	8,043,284	Iowa	43,112	****	
Georgia	691,392	449,007	3,696,513		17-063,353	127-946-177	121-851-803

VALUE of IMPORTS from and Exports to Foreign Countries in 1841.

		Expo	orts.		E.	Expo	erts.
	Imports.	Domestic Produce.	Foreign Produce.		Imports.	Domestic Produce-	Foreign Produce.
	Dollars.	Dollars.	Dollars.	(Dollars.	Dollars.	Dollars.
U. Kingdom	46,662,815	46,155,735	3,386,538	Italy, Sicily	1,739,293	1,205,881	
Gibraltar				Rest of Europe	1,959,965	2,285,558	149,983
British India	1,236,641	532,334	430,867	Mexico	3,284,957	886,513	1,150,107
Brit. W. Indies	1,105,594	3,714,879		Venezuela	2,012,004	532,419	230,083
Brit. America	1,968,187	6,292,290	364,273	Hayti	1,809,684	1,093,634	61,923
Other colonies	105,322	142,977	133,627	Sp. W. Indies	14,127,047	5,828,856	660,158
				Other W. Indies	1,884,912	1,952,170	
	51,099,638	57,859,146	4,507,256	Brazil	6,302,653	2,941,991	575,289
France	23,993,812	18,410,367	3,356,388	Argen. Republic	1,612,513	509,007	152,939
Russia	2,817,448	146,118		Chili, Peru	1,755,356	846,410	
Holland	1,638,022	2,237,444	277,478	China	3,985,388		485,494
Belgium	374.833			Other countries	3,787,992	2,761,504	1,734,459
Hanse Towns	2,449,964	4,110,655					
Spain	1,310,696	386,001	27,819	Total	127,946,177	106,382,722	15,469,081

and other raw products: for there can be no doubt, that to the same degree in which the tariff prevents them from buying foreign manufactures, it goes to exclude their agricultural produce from foreign countries.

The Pairscral Poers, stated in their order from N. to 8. along the A tlantic, are the following:—Boston, in Massachusetts, 210 miles N. E. of New York, lies on a peninsula in a bay in lat. 49° 21′ N., long. 71° 5′ W. Pop. 93,383. The harbour is deep, capacious, and safe, with extensive wharfs; and its entrance is fortified. The trade consists chiefly in exporting mannictured goods, beef, pork, fish, and whale-oil, in exchange for flour, rice and other grain, cotton, tobacco, stores, coals, &c., from the more southern states; but it has also an extensive foreign trade.

**Rev York, the commercial capital of the United States, lies in lat. 40° 47′ N., long. 74° 10′ W., on Manhattan Island, at the mouth of the Hudson, opposite Long Island and State land, through the channel between which, called the Narrows, the port is usually approached from the Atlantic. Pop. 312,710. The inner bay forms a magnificent harbour, 8 miles in length by 4 or 5 in breadth; and the largest ships may lie close to the quays. By means of the Hudson and the extensive system of canals and railways with which New York is connected, it is the port not only for the surrounding country, but in a great measure also for Upper Canada, Ohio, Michigan, and Indiana; while, by means of the Eric canal and lake, and the Ohio and Wabash canals, goods may be conveyed to the emportumes on the Missistippi, even to New Orleans, and conversely. It has also an extensive transit trade with the S. states. Its imports and exports thus embrace every article that enters into the trade of the Union. The value of the merchandise annually loaded and unloaded is estimated at nearly \$200,000,000; and the coasting arrivals exceed 5600. In 1839, 3118 vessels (546,526 ton.) artived from first prival trades of the Western States being mostly sent down the Missisti

its mouth. Pop. 11,214. It lies 90 miles S. W. Charleston, and its trade is very similar. The total annual exports approach \$15,000,000.

Mobile, in Alabama, 115 miles E. New Orleans, in lat. 30° 40′ N., long. 88° 11′ W., at the mouth of the Mobile river, in the Gulf of Mexico. Exports, chiefly cotton. Imports, trifling. New Orleans, in Louisians, the great and flourishing emportum of the western and southern states, lies in lat. 39° 56′ N., long. 90° 9′ W., on the Mississippi, 105 miles from its mouth, in the Gulf of Mexico. Pop. 108,191. It is built on a swampy unhealthy plain. The river is very deep at the town, and is navigable for the largest vessels several hundred miles inland; but there is a bar at its main entrance at Balize, with only from 12 to 14 feet water at tide. Exports, cotton, flour, corn, meal, bacon, pork, tobacco, shrighes, stores, lead, sugar, &c., the whole amounting in 1839 to \$30,995,936, exceeding in value the American produce shipped at New York; but the imports are comparatively small, amounting in 1839 to only \$12,864,942.

Measurers, Monrey, Barres, &c.

MEASURES, MONEY, BANKS, &c.

MEASURES, MONEY, BANES, dc.

Measures and Weights same as in Britain, except the measures of capacity, which continue to be those used in England prior to the introduction of the imperial system. Commodities formerly sold by the hundredweight, however, are now, with few exceptions, sold by the 100 libs., termed in some of the states a quintal.

The barrel of flour contains 5 Winchester bushels, each bushel weighing about 57 lbs. The barrel of Indian corn contains 34th Winchester bushels, each bushel weighing about 57 lbs. The barrel of pickied beef or ports, 200 lbs. the barrel of pickied beef or ports, 200 lbs. the barrel of pickied beef or ports, 200 lbs. dollars, and shid definite 100 cents.

Money.—The integer of account is the dollar (\$1, which is divided into 100 cents.

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Gold coins; the eagle (of 10 dollars) weighing 258 troy grains, 9-10ths fine, or 371; grains pure, and 41; grains alloy; also the half-cents.

Silver coins; the dollar (of 100 cents), weighing 258 troy grains, 9-10ths fine, or 371; grains pure, and 41; grains alloy; also the half-cents of the united states, in Pennsylvania, originally with a c

In the same proportion. Copper coins; the cent weighing 206 troy grains, and the half-cent.

The expenses of the mint being defrayed by the government, coin is exchanged for building, deducting is per cent. for the advance for the mint is 1 part in 144.

The value of the eagle, of full weight, is 41s. 176d., equal £2, 1s. 1/d. sterling nearly; and of the dollar, 50-17d., equal 4s. 2/d. sterling nearly; and of the dollar, 50-17d., equal 4s. 2/d. sterling nearly. But the value of the dollar of account, which since 1834 [Eagle, 1 has been estimated in gold at \(\frac{1}{2} \), the of the eagle, or rather \(\frac{1}{2} \) the sterling.

The par of exchange with Britain, deduced from the pold coins, is thus 49\(\frac{1}{2} \) per cent. the rise is a commonly expressed (as more articularly explained under \(\frac{1}{2} \), the sterling.

But the value of the dollar of account, equal \$4.86\(\frac{1}{2} \) cents per \(\frac{1}{2} \) is thus 49\(\frac{1}{2} \) per cent. the rise per \(\frac{1}{2} \) is the sterling.

But in practicularly explained under \(\frac{1}{2} \), the following foreign gold oons are allowed currency by \(\text{sterling} \).

Bullia \(\text{Sterrope are commonly drawn at 60\) days sight. The days of grace are 3. The foreign exchange is regulated chiefly by the state of the bill market of New York.

The following foreign gold cons are allowed currency by \(\text{sterl} \); and those of Britain, \(\frac{1}{2} \); and circulation, \(\frac{1}{2} \); \(\text{or for the limits of the bill market of No. 1 \); and the following foreign gold and a decommon the sales of public lends and the customs of the dollar at a count of the following foreign gold as more selected to \(\frac{1}{2} \); \(\frac{1}{2} \); \(\frac{1}{2} \); \(\frac{1}{2} \); \(\frac{1}{2} \); \(\frac{1}{2} \); \(\frac{1}{2} \); \(\frac{1}{2} \); \(\frac{1}{2} \); \(\frac{1}{2} \); \(\frac{1}{2} \); \(\frac{

A considerable portion of the country consists of table-land, yielding nothing but pasture for large herds of wild cattle. Towards the west the table-land is intersected by numerous valleys,

which, as well as those adjoining the Plata, contain many fertile tracts, where the grains and fruits of Southern Europe are cultivated with success. The eastern coast district is low and poor, being mostly covered with sand and intersected by lakes. It is not known whether the precious metals are found, but at San Carlos a rich copper mine is worked.

Montevidee, the metartopolis, and only port of consideration, is a strongly fortified town, situated on a peninsula on the northern shore of the river Plata, 130 miles E. of Buenos Ayres, in lat. 34°54'S., long. 56°15'E. Pop. 18,000. The harbour is the best on the Plata; but is exposed to the violent west winds called pusperos. It is of a circular shape, 4 miles in diameter, with a narrow entrance, and is deep enough for large ships. The trade resembles that of Buenos Ayres. In 1835, the value of merchandise exported was £631,392; in 1862, British imports were £643,49c. In 1835, the value of merchandise exported was £631,392; in 1862, British imports were £643,60c, the of merchandise exported was £631,69c,—Accounts are kept in dollars, worth, according to a recent quotation, about 440 or ha 8d. sterling.

USANCE, the customary or usual time for which bills are drawn.

USQUEBAUGH, an Irish compound of spirits, raisins, cinnamon, cloves, &c.

USURY, is the taking, on previous agreement, in England and Scotland of more than £5, in Ireland more than £6, for the forbearance of £100 during a year, and so in proportion. Of late years the usury laws have been relaxed in favour of bills not having more than 12 months to run, and simple loans above £10, not on real security, as explained under Interset.

VALONIA, the acorn of a species of oak (Querous epilops) produced in the Morea and Asia Minor. It is used in tanning; the astringent principle is mostly confined to the acorn-cup. Valonia is of a bright drab colour, becoming black, however, when exposed to damp, which injures it. About 160,000 cwts. are annually imported into the United Kingdom.

VAN DIEMEN'S LAND, OR TASMANIA, an insular appendage to the S.E. part of the Australian continent, subject to Britain. Area, 27,000 sq. miles. Popu-

VAN DIEMEN'S LAND, or TASMANIA, an insular appendage to the S.E. part of the Australian continent, subject to Britain. Area, 27,000 sq. miles. Population in 1847, 70,758, including 24,133 convicts. See TASMANIA, in Supplement. The island is intersected from north to south by a chain of mountains about 3300 feet in height; and the remainder is composed of alternate hill and dale, a great part clear, well watered by rivers, and mostly fit for cultivation or pasturage. The climate is cooler than that of New South Wales, and the country has not the same extremes of barrenness and fertility. Wheat, barley, cats, each potatoes are produced of superior quality; and the sheep supply fine wood, though it is said scarcely equal to that of the continent. Blackwood and pine are the chief timber trees. Van Diemen's Land was discovered by Tamman in 1642. In 1803, a convict establishment was founded by the British. After 1813, it was frequented by voluntary emigrants; and between 1824 and 1835, the grants of land were not less then 1, 128,000 acres. In 1839 the sales amounted to 49,396 acres, at the average of 10s. 18d., and in 1840 to 88,296 acres, at 11s. 44., exclusive of town lots and military grants. In 1838, 108,000 acres were under crop, yielding 570,000 charles corn, including 360,000 of wheat; and the live-stock consisted of 1,314,000 alsep, 75,000 cattle, 8650 horses, and 3400 goats. In the same year there belonged to the colony 101 vessels, burden 8332 tons; of these, nineteen, burden 900 tons, were employed in the whale-fishing.

The principal exports are, wool (in 1841, 3,567,531 lbs.) whale-oil, bark, &c., amounting in 1840 to £897,000; and the imports, down, rising all sorts of British manufactures, colonial products, spirits, wines, farming implements, &c., amounted in the same year to £988,356, including £737,250 from Britain; the shipping inwards and outwards amounting each to about 80,000 tons. Hobert-Town, the capital, on the 8, side, possesses a splendid harbour on the Derwent river, to miles up the Tamar

VELLUM, a fine white smooth kind of parchment made of calf-skin.

VELTE, a French measure for brandy, reckoned in Cognac at 1.61 Imp. gallon; in Bourdeaux at 1.58 do.; and in Nantes at 1.24 Imp. gallon.

VELVET (Fr. Velours. Ger. Sammet. It. Vellulo), a beautiful silk fabric, of a compound texture; having, in addition to the warp and shoot of plain silk, a soft chag or pile on the outside, occasioned by the insertion of short pieces of silk thread doubled under the shoot; the other side being a strong close tissue. Its richness depends upon the relative number of the pile threads; and manufacturers accordingly designate different qualities as eviet of two four, or six threads according rigly designate different qualities as velvet of two, four, or six threads, according to the number. Velvet is now also made of cotton; a strong kind of which, called Velveteen, is used for men's apparel.

VENEZUELA, one of the three republics of COLOMBIA, occupies the N.E. corner

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of S. America, between New Granada and British Guiana, having Brazil on the S. Area, 404,000 sq. miles. Pop. 905,000, including 250,000 whites of Spanish origin. Capital, Caraccas; pop. 25,000. Constitution, a federal republic. Venezuela has been only partially explored. The N. part is mountainous, containing on the N.W. a branch of the Andes, but the remainder is generally level, particularly the course of the Orincoo, a magnificent river which intersects the country from W. to Es, sometimes overflowing considerable districts. The B. part mainly consists of Manos, boundless plains similar to the pampas of Le Plata, affording pasturage to innumerable herds of eattle. Unture and colonisation are mostly confined to the coast territory, especially the value of Aragus; where are reared coffee, cacao, tobacco, indigo, and cotton, which, with jerked beef, hides, mules, drugs, and dey-woods, form the leading exports. The imports tolefly consist of cottons and linens, with woollens, silks, flour, pork, and wine; and the principal commercial relations are with the United States, Britain, Denmark, Germany, Spain, France, and Holland. In 1839, the exports amounted to £395,198, and the imports to £717,091.

La Guayro, the port of Caraccas, and chief trading city, lies on the Caribbean Sea, in lat. 16° 36° N. long, 66° 56° W. Pop. 4000. The port is a mere roadstead; and the town is gloomy, hot, and unhealthy. In 1839, \$6,337 tons of foreign shipping arrived, with cargoes valued at £570,318; and the exports amounted to £398,798. Maraccageo, on the strait connecting the great lake of that name with the sea, and Angostura, \$40 miles up the Orinoco, are the chief other ports. Macastres and Weights same as Spain. Money, Colombian dollars of 8 reals: usual exchange, \$5 = £1. Revense in 1840, \$2,945,259; expenditure, \$1,933,750. S
VERDIGRIS (Fr. Vert-de-gris. Ger. Grüns-pan), the subacctate of copper. When pure, it occurs in blueish accicular crystals; but commonly it is in large masses, from having been packed when moist in leath

VERMICELLI, a thready paste of flour and water, similar to Maccaroni.

VERMICELLI, a thready paste of flour and water, similar to Maccaroni.

VERMILION, a beautiful scarlet powder, the red sulphuret of Mercury.

VICTORIA. See Supplement.

VINEGAR (Fr. Visatyre. Ger. Essig. It. Aceto. Por. and Sp. Vinagre), is an impure Acerto Acid, of which four varieties are known in commerce, namely, wine, malt, sugar, and wood vinegar. The best is that prepared in France from wine. In this country, beer or malt vinegar was the kind chiefly used before the present improved method of producing it from pyroligneous acid. This acid, sometimes called crude vinegar, is obtained by the destructive distillation of wood, and is now manufactured on a large scale. It is at first contaminated with tar, but after being refined and diluted with water, it is applicable to all the purposes for which common vinegar is used. Vinegar is apt, on exposure to the air, to become turbid and ropy, and at last vapid: it should therefore be kept in bottles completely filled and well-corked. Good French vinegar will keep in perfection many years, if the bottle be not frequently opened.

The manufacture and sale of vinegar are regulated by the act 58 Geo. III. c. 65. An accise duty of 2d. per gallon is levied upon the manufacture; and at present about 3,000,000 gallons are annually brought to charga. Nearly 9000 gallons of origin vinegar are likewise imported.

VIOLIN. [Musical Instruments.]

VITRIOL, or COPPERAS, a salt formed by the union of sulphuric acid with oxides of iron, copper, and zinc; the first forming the sulphate of iron, called green vitriol; the second, sulphate of copper, or blue vitriol; and the third, sulphate of cino, or white vitriol. Sometimes the name of red vitriol is given to the sulphate of cohalt. Vitriol, when pure, occurs in beautiful crystals. It is extensively used in dyeing, ink-making, the manufacture of colours, and in medicine.

WAINSCOT, a name applied to the oak imported in logs from N. Europe. WALNUT, a large European tree (Juglans regia), yielding a nut the kernel of which is prized both for the table and for the oil which may be expressed from it. The timber of the tree was much employed in furniture-making before the introduction of mahogany, and it is still extensively used by the turner.

WANGHEES, a kind of canes imported from Canton.

WAREHOUSING OR BONDING SYSTEM, a system under which certain warehouses are appointed, under the charge of officers of the customs, in which goods may be deposited without being chargeable with duty until they are cleared for consumption. This system affords the most liberal convenience to the merchant, and a general facility to the trade of a country. The tax on a commodity is paid just when it is wanted, and when it is therefore least inconvenient to pay it.

Suppose, for example, that a merchant imports goods, and is required to pay a duty upon them immediately, and before he has found a market for them; he must either pay the tax and hold the goods, in which case the consumer will have to repay not only the tax but the interest on it; or he must sell the goods, and if he parts with them at a loss or inconvenience, trade is injured, and the general wealth and consequent productiveness of taxation proportionally diminished. Besides, the necessity of having to pay duties immediately on importation is a bar to the entrepôt and carrying trade of a country. Notwithstanding the obvious advantages of the warehousing system, however, it is only partially known in foreign countries, and in our own dates no farther back than 1803 (43 Geo. III. c. 132), previous to which the duties on all goods imported had either to be paid at the moment of their importation, or a bond was required, with security for their future payment. Since 1803 the system has undergone several improvements, the whole of which are embraced in the existing warehousing act passed in 1833.

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Abridgment of the Warehousing Act, 3 & 4 Wm. IV. c. 57, with the Alterations of later Acts, viz. 4 & 5 Wm. IV. c. 89, and 5 & 6 Vict. c. 47, and c. 56, &c.

of later Acts, viz. 4 & 5 Wm. IV. c. 8
§ 1. Consolidation of former acts.
§ 2. The Commissioners of the Treasury are
to appoint ports for the purposes of the act; and
the commissioners of customs, subject to their
directions, are to appoint in what places therein,
and in what manner, goods may be warehoused,
§ 3. Whenever a warehouse is approved of, it
must be so stated in the order of appointment.
§ 4. Appoints warehouses and bonds previous
to the act to continue.
§ 5. The commissioners of customs are to provide tobacco warehouses at the legal porta.
§ 6. The treasury and commissioners of customs may revoke any former warrant or order,
or make alterations or additions.
§ 7. Orders as to warehouses of special security, must be published in the Gasette.
§ 8. Before any goods are entered in any

or make alterations or additions.

§ 7. Orders as to warehouses of special security, must be published in the Gasette.

§ 8. Before any goods are entered in any warehouse, the proprietor or occupier thereof, if he be willing, is to give general security for the payment of the full duties on all goods warehoused, or for the due exportation thereof; and if he be not willing, the different importers must give security in respect of their particular goods.

§ 8. If any warehoused goods be the property of the occupier, and be bend fide sold by him, on a written agreement signed by the parties, or a written contract of sale made, executed, and delivered by a broker or other person legally sutherized for the parties, and the price os stipulated is actually paid or secured by the purchaser, every such sale is valid, although the goods remain in the warehouse; provided that a transfer, according to the sale, be entered in a book to be kept by the officer in charge, who must enter such transfers, upon application of the owners, and produce the book upon demand.

§ 10. Goods to be stowed in warehouse so as to afford easy access; and if taken out without due entry, the occupier is liable for the duties.

§ 11. Warehoused goods, fraudulently concealed or removed, are forfeited; and any person gaining access to the goods, except in the presence of the proper officer, forfeits £500.

§ 12. Within one month after any tobacco has been warehoused, and upon the entry and landing of any other goods, the proper officer is to take a particular account thereof, and mark "Prohibited" on goods prohibited for home use; and no alteration can be made on the packages, except in the cases after mentioned.

§ 13. All goods entered must be carried to the warshouse under the care of the proper officer. [By 5 & 6 Vict. c. 47, § 52, any person frandulently removing goods entered to be warehoused, forfeits treble their value, or £100.

§ 14. Goods warehoused must be cleared for exportation or home use within 3 years, and all surplus stores of shi

9, and 5 & 6 vict. c. 4/, and c. 56, &c.
by Treasury); and if any goods be not so cleared, the commissioners of customs may cause them to be sold, the produce to be applied to the payment of charges, and the overplus, if any, paid to the proprietor. When sold, such goods are held subject to all the conditions to which they were subject previous to sale, except that a further time of 3 months from the sale be allowed to the purchaser for clearing. If not so cleared, they are forfeited.
§ 18. If any goods entered to be warehoused, or to be delivered, be lost by accident, commis-

some any goods entered to be warehoused, or to be delivered, be lost by accident, commissioners of customs may remit the duties.
§ 16. No goods warehoused can be removed, except upon due articles.

§ 16. No goods wavehoused can be removed, except upon due entry for exportation, or for home use, except goods to be alipped as stores, and which may be alipped without entry or payment of duty for any ship of the burden of 70 tons at least, bound upon a voyage to foreign parts, the probable duration of which out and home will not be less than 40 days: Provided such stores be borne on the victualing bill, and shipped as the commissioners may appoint.

§ 17. Rum of the British plantations may be hipped as stores without entry or payment of duty, and any surplus stores may be delivered to be reshipped for the same ship, or for the same matter in another ship, without entry or payment of duty, if duly borne upon the vicualing bills. If the ship for which surplus stores have been warehoused, be broken up or any other ship belonging to the same owners, or

stores have been warehoused, be broken up or sold, the stores may be so delivered for the use of any other ship belonging to the same owners, or may be entered for payment of duty, and delivered for their private use, or that of the master.

§ 18. Upon the entry of such goods for home use, the person entering them must deliver a bill of the entry and duplicates, as in the case of goods entered to be landed, as far as the rules are applicable, and at the same time must pay the full duties, according to the quantity first taken of the respective packages at the time of the first entry and landing, without abatement, except as by this act otherwise provided; and if the entry be for exportation or for removal to any other warehouse, and any of the packages be deficient, a like entry inwards must be passed in respect of the quantities so deficient, and the full duties be paid on the amount before delivery or removal, except as by this act is otherwise provided; and if any goods so deficient be such as are charged according to value, it is to be estimated at the price for which the like goods of the best quality have been lately sold.
§ 19. The duties upon tobeaco, sugar, and spirits, when taken out for home use, are to be charged upon the quantities actually delivered; except that if sugar be not in a warehouse of special security, no greater abatement on account of deficiency is to be made than shall be

after the rate of 3 per cent, for the first 3 months, and 1 per cent. for every subsequent month during which the sugar is warehoused; and also except, that if spirits (being any other than rum of the British plantations) be not in a warehouse of special security, no greater abatements for deficiency is to be made than as follow:—

draw off rum into casks containing not less than 30 gallens each, for the purpose only of being disposed of as stores for ships; and to draw off any other spirits into quart bottles, under such regulations as the commissioners of customs may direct, for the purpose only of being exported; and to draw off and mix with wine any brandy secured in the same warehouse, not exceeding the proportion of 10 gallons of brandy to 100 gallons of wine; and to fill up any casks of wine or spirits from any other casks of the same, respectively secured in the same warehouse; and to take such moderate samples of goods as may be allowed, without entry and payment of duty,

during which the sugar is warehoused; and also accept, that is plarts (being any other than must of the British plantshouse) so not in a warehouse of special security, no greater abatements of special security, no greater abatements of special security, no greater abatements of special security. The properties of the

§ 38. Nor are they to be delivered, until they or their packages be marked as the commissioners may deem necessary and practicable. § 39. The Treasury may make regulations for ascertaining the amount of any decrease or in-

ascertaining the amount of any decrease or increase of the quantity of any particular sorts of goods, and direct what abatement of duty payable under this act for desciencies may be made; but if such goods be lodged in warehouses of special security, no duty is to be charged for any amount whatever of deficiency on exportation, except in cases where suspicton may arise that part has been clandestinely conveyed away; nor are such goods (unless wine or spirits), to be measured, counted, weighted, or gauged for exportation, except in such suspicious cases.

exportation, except in such suspiciou 40. In warehouses not of specis

IV. c. 66, § 4, it is provided that nothing contained in this section shall be held to extend to lose occasioned by fire, and by 5 & 6 Vict. c. 47, § 50, the commissioners are authorized to remit the duties on any goods destroyed "by any unavoidable accident" in the warehouse.]

WAT

avoidable accident." In the warehouse,]
§ 43. Upon the entry outwarks of goods to be exported from the warehouse, and before occide to exported from the warehouse, and before occide is granted, the person in whose name they are entered must give security by bond in double the value of the goods, with one surety, that they shall be duly exported, and landed at the place for which they are entered outwards, or otherwise accounted for.
§ 43. Requiring bond on the exportation of beef or pork that they are not to be used as sensors, in repealed by 5 & 6 Viet. c. 47, § 48.
§ 44. No goods are to be exported from the warehouse to the Isle of Man, except such as may be imported thither in virtue of license.
§ 45. All goods must be removed under the care of the proper officer.

be measured, counted, weighed, or gauged for exportation, except in such suspicious cases.

§ 40. In warehouses not of special security, the following allowances for waste are to be made on exportation, viz.:—For any time not exceeding? year, 1 gal.; exceeding? year, 2 gals.; exceeding? years, 3 gals.

Spirits, upon every 100 gallons hydrometer proof, vix.—For any time not exceeding 8 years, 3 gals.

Spirits, upon every 100 gallons hydrometer proof, vix.—For any time not exceeding 6 months, and not exceeding 18 months, and not exceeding 18 months, and not exceeding 18 months, and not exceeding 18 months, and not exceeding 18 months, and not exceeding 2 years, 5 gals.

Coffee, cocoa-nuts, pepper, for every 100 lbs., and in proportion for any less quantity, 2 lbs.

§ 43. Requiring bond on the exportation of bounds are to be used as senters. If exported from the warchouse to the lale of Man, except such as may be imported thither in virtue of license.

§ 44. No goods are to be exported from the warchouse to the lale of Man, except such as may be imported thither in virtue of license.

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§ 48. No goods are to be exported from the warchouse to the lale of Man, except such as may be imported thither in virtue of license.

§ 46. No goods are to be exported from the warchouse to the lale of Man, except such as may be imported thither in virtue of license.

§ 48. No goods are to be exported from the warchouse to the lale of Man, except such as the proper officer.

§ 48.

ation for which the underwriter accepts the engagement; it is therefore an absolute condition, and if it do not coour as specified, the insurance is void, whether the circumstance be owing to the conduct of the insured or not, and whether it affect the risk or not. Warranty and mere representation differ from each other in this, that the former must absolutely agree with the event to the most minute particular, while the former must absolutely agree with the event to the most minute particular, while the latter only requires to agree in substance, and does not affect the contract, unless through fraud or negligence it shall have increased the actual risk. It is divided into express and implied,—the latter being merely used to express the conditions on the part of the insured necessarily arising from the nature of the contract; as, that the ship shall be seaworthy, navigated with skill and care, that the voyage is lawful, and shall be performed without wilful deviation, &c. The most important and ordinary warranty during peace, is generally as to the time of sailing. Where a ship is warranted "to sail" on a particular day, she must be really on her voyage, having made every preparation, by having taken in her whole cargo, cleared at the custom-house, &c.; and if so prepared for her voyage, and having set sail, she be afterwards detained in some port of the same territory, as by an embargo, or to form convoy, it will be held as compliance; but not so if the preparations for commencing the voyage have not been completed, or if, having been completed, the vessel is prevented from breaking ground by stress of weather or otherwise. "As ssel is prevented from breaking ground by stress of weather or otherwise. to the question, what shall amount to a sailing, to satisfy the warranty, there can be no doubt that, where a ship once breaks ground, and is fairly under sail upon her voyage, though she go ever so little a way, and afterwards put back from stress of weather, or apprehension of an enemy in sight; or if she be then put under an embargo, and detained beyond the time of sailing; this is still a beginning to sail, and the interruption does not alter the case, because the warranty is already complied with" (Marshall, 365). There is a distinction between a warranty to sail, as above, and a warranty to depart, the latter being held to import that the vessel is finally out of port.

All express warranties must appear on the face of the policy. It does not require, however, to appear in the body of the policy,—a note on the margin suffices. [Seaworthiness and Deviation.] (Park on Insurance. Marshall on Insurance.)

For warranty in insurance against fire and on lives, see Insurance.

WATCH (Fr. Montre. Ger. Uhr, Taschenuhr), a pocket timepiece composed of wheels and pinions,—a regulator to direct the quickness or slowness of the wheels, and a spiral spring which communicates motion to the whole. Chronome-

ters are watches having the variable force of their mainspring equalized by a fusee or variable lever, and also an expansion balance as a compensation for heat and cold. Nautical chronometers are larger machines of the same kind, secured in a box, and used for ascertaining the longitude at sea.

Spring watches were invented about 1638 by Dr Hooke, or as some contend in 1636 by Mr Huyghens, and various improvements have been since effected in their construction. In 1764, a chronometer made by J. Harrison of London was adjudged to entitle him to the premium of £20,000 originally offered by Queen Anne for the discovery of the longitude. Besides Harrison, the names of Mudge, Barnshaw, san., Arnold, sen., Brockbank, and Arnold & Dent, have attained calchrity as chronometer-makers.

the names of Mudge, Earnabaw, sen., Arnold, sen., Brockbank, and Arnold of Dens, may assume selebrity as chronometer-makers.

Watch movements are made chiefly in London, Coventry, and Lancashire; but they are polished and adjusted in most large towns throughout the kingdom. Watch-cases, though not subject to any duty, are stamped at the seasy offices to determine the fineness of the metal. The annual value of the manufacture in this country is estimated at £1,500,000, and nearly 20,000 British

which movements are nown throughout the kingdom. Watch-cases, though not subject to any duty, are stamped at the assay offices to determine the finences of the metal. The annual value of the manufacture in this country is estimated at £1,500,000, and nearly 20,000 British watches are annually exported.

The principal seat of the watchmaking trade on the continent is Switzerland. In that country, says Dr Bowring, it is carried on in the mountainous districts of Neuchatel, where nearly 120,000 are produced annually, in the canton of Berne, and in the district of Geneva. "Switzerland as long furnished the markets of France; and though the names of certain French watchmakers have obtained a European celebrity, yet I was informed by M. Arago that an examination into this trade had elicited the fact that not ten watches were made in Paris in the course of a year, the immense consumption of France being furnished from Switzerland, and the Swiss works being only examined and rectified by the French manufacturers. The contraband trade into France was immense." (Report on Switzerland, p. 34.) The Swiss and French watches, however, are commonly much inferior to the English, being in general single-cased and filmsy in their construction.

WAX (Du. Wasch. Fr. Circ. Ger. Wachs. It. Por. & Sp. Cera. Rus. Wask), or Bees' Wax, a firm solid substance, moderately heavy, and of a yellow colour, formed by melting the comb into cakes after expressing the honey. The best is that of a lively colour, and an agreeable odour something like that of honey. When new it is toughish, yet easy to break; but by age it becomes harder, more brittle, loses its fine colour, and in a greet measure its smell. Wax is generally bleached and used in making candles. It is also used in taking casts and moulds, and as an ingredient in cerates and ointments. In addition to our large home supply, about 8000 cwts. are annually imported, chiefly from W. coast of Africa, Barbary, and the E. Indies; but in small quantities also from the W. Indies, United States,

ciple which has been applied in SOUTH AUSTRALIA. S

WEST INDIES (BRITISH), comprise Jamaica, one of the Greater Antilles; a variety of the smaller islands forming the Caribbean Chain, classed as Windward and Leeward; and the Bahamas. Total population, 714,720,—more than four-fifths being emancipated negroes. These islands have, with few exceptions, colonial governments, with an elective legislative assembly, who enact all local laws, subject, however, to the veto of a governor appointed by the crown. S

The amend amend of the West India ambittaless is manufathous. Many of the Islands exhibit

Ject., nowever, to the veto of a governor appointed by the Grown. Be The general aspect of the West India archipelago is mountainous. Many of the islands exhibit manifest proofs of volcanic origin; and they are all subject to violent shocks of earthquakes. Their soil is in general productive far beyond that of most parts of Europe; moisture and heat combining to produce a surprising luxuriance of vegetation. The year, as in most tropical climates, is divided into two seasons, the dry and the set; yet four may be distinguished,—the spring, with gentle showers in April and May; the hot sultry summer, from May till October, when the heavy autumnal rains begin, and continue till December; from which till April, in fact the winter, agreeme and cool weather prevails. Between August and the end of October, the islands, except Trinidad and Tobego, which lie farthest S., are subject to furious hurricanes; these, however, are not very frequent, and are unknown except during this short period.

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Jamanca, the most important of the British West India Islands, situate 100 miles S. of Cuba, is 165 miles long by 40 in average breadth. It is traversed from E. to W. by the lofty Bine Mountains, covered with majestic forests. On the N. side the surface rises from the shore with gentle undulations, separated by spacious walleys, and clothed with pinento groves and coffice plantations. On the S. side the land is bolder, and interspersed with hill-ranges, between which are extensive asvannable and ugar-existes. But upon the whole, the hiand, though well watered, and in some parts feetile, is not generally productive, and requires shifted cultivation to make it yield heavy crops. The seat of government is Spanish Town; it lies inhand it miles distant from Kingston, the principal town, situated on Fort Royal, on the S. coast, in lat. 17° 20° N., long, 70° 40° W., pop. 33,000. The colon of the Control of the

	Area	Paralatica		1831.			1841.	
			Bugar.	Russ.	Cuffee.	Bugur.	Rem.	Colles.
	8q. m.		Cort	Gals.	I.be.	Cwt	Grla.	Lbs.
Jamaica	6,250	370,000	1,429,093	3,522,463	15,644,072	528,585	1,276,551	.7,618,890
Barbadoes	164					257,108		1,51
St Vincent	130	26,530	221,662	160.211	44	110,205	88,999	l
St Lucia	275	16,000	72,376	12,628	89,349	61,115	13,037	18,287
Grenada	125					84,270		
Tobago	102			498,717		48,164		
	2,000					284,605		
Trinidad	108					144,103		
Antigua								
St Christopher	69			256,932	415.004	63,936		1
Dominica	200		56,339			42,342		127,60
Nevis	90		49,924	147,750		12,124	2,936	• • • • •
Montserrat	47	7,600	96,137			10,839	9,281	
Tortola		7,730	15,559	48	ł I	8,397	834	l
Bahamaa	5,494	20,000			95,716	100	4,560	5,13
Demerara	23,000		802.134	2,332,970	1,991,359			745,63
Berbice	22,000		122,088			90,063	120,301	1,363,93
Der 1900	,22,000	,0,000	,000	221,010	2,000,102	50,000	220,002	-,,
	1	ı	4 300 000	- 010 000	90,030,804			-

.-The great falling off between 1831 and 1841 is attributable mainly to the change produced by the measure of negro emancipation; but of late years there have likewise been deficient crops arising from ordinary causes.

The imports consist of lumber from British America: herrings, codfish, flour, salt beef, and other kinds of provisions; wine; and manufactures of all kinds from the mother-country. On an average of the five years to 1841, the declared value of British produce and manufactures carried to our West India colonies (including Guiana), amounted to £3,400,000. Of this, however, a considerable portion is destined for re-exportation to the Spanish main.

Vessels with homeward cargoes begin to arrive in Britain in April and continue till October. And the annual orders for plantation stores are received by our West India merchants in autumn, distributed amongst the manufacturers or dealers in September and October, and shipped in November and December.

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ber and December.

Measures and Weights, same as Britain. Money.—Accounts are now generally kept in sterling; but in some places in dollars, which by proclamation, September 21, 1838, are valued at 4s. 2d. sterling each: the value of the gold doubloon is fixed at £3, 4s. The Colonial Bank, instituted in London, 1836, has branches in most of the islands, which issue notes, and otherwise conduct business on the Scottish system. [See Colony. Slave. Sugar.]

NEESCH ANDLY ANDLA VILLAMISC (MODERICA).

WEST INDIA ISLANDS (FOREIGN), embrace, besides HATTI, now inde-

WEST INDIA ISLANDS (FOREIGN), embrace, besides Hatti, now independent, the following possessions of European powers:—
SPAIN has the magnifeen tistand of Cura, already described. Porto Rico, a large, well watered, fertile, and comparatively bealthy island, 80 miles E. of Hayti; area, 3,700 square miles; population, 360,000, including only 42,000 slaves: Capital, San Juan: chief exports in 1839, 692,458 ewis. sugar; 16,434 cwis. coffee; and 3,311,720 gallons molasses. Also the islets Maryarita, Testigos, Tortuga, Blanquilla, Orchilla, Rocca, and Arcs.
France: possesses Quadaloupe, 40 miles S. E. Antigua, consisting really of two islands, Grande Terre and Guadaloupe Proper or Basse Terre, separated by the Salt River Channel. Chief ports, Basse Terre, the capital; and Point-4-Pitre, nearly destroyed by an earthquake, Pebruary 1843. Chief exports in 1836, 36,377,548 kilog. sugar; 2,554,424 kilog. molasses; 915,354 kilog. coffee. Martinique, 20 miles N. St Lucia; capital, Fort Royal; chief exports in 1836, 29,94,754 kilog. sugar; 2,483,993 litres molasses; 519,507 kilog. coffee. Also the islets Marie Galcante, Alt Saints, Descada, and St Martin (N. part).
HOLLAND has Bonaire, Curaçoa, Oruba, St Martin (S. part), Saba, and St Eustatius.
Dermark possesses St Thomas and St John in the Virgin group; also St Crotz.
SWEDER has only St Bartholomese.
The geographical character, productions, and course of trade of these islands, are similar to those of the British West India Islands. B
WHALE, a cetaceous class of marine animals, of which there are several species;

WHALE, a cetaceous class of marine animals, of which there are several species; the principal being the Greenland whale (Balana mysticetus, Linn.), usually from 50 to 60 feet in length, and from 30 to 40 feet in circumference, inhabiting chiefly the Arctic seas; and the spermaceti whale, already described. [Spermaceti.] Both are of commercial importance on account of the oil contained in their fat or

the Arctic seas; and the spermaceti whale, already described. [SPERMACETI.] Both are of commercial importance on account of the oil contained in their fat or blubber, and of the shalebone, or horny lamins in their upper jaw, which is applied to various useful purposes; and large fleets are fitted out for their capture. The Northern Whale Fishery originated in the discoveries of the voyagers who, in the end of the 16th century, attempted to find a passage through the Northern Ocean to India. It was first pursued, by the English and Dutch, in the seas of Greenland and Splitzbergen; and their example was speedily followed by others. The fishery was long confined to these seas; but after 1815, they were gradually abandoned for Davis' Straits, where also whales have recently become so scarce, that their pursuit by British vessels has nearly ceased. In the twenty years ending 1834, the average annual number of our ships employed in this fishery, was 180; aggregate burden, 37,1'00 tons; procuring 1024 whales, yielding 11,313 tuns oil, and 500 tons whalebone; making the annual produce, at the average prices of £20, 18s. per tun for oil, and £163 per ton for whalebone, about £420,000. The vessels were fitted out mostly from the north-eastern ports. But his great fishery, which in 1820 employed 50,000 tons of shipping, manned by our best seamen, now engages only one or two vessels from Peterhead and the adjoining ports.

The Southern Whale Fishery was begun by the British during the interruption which the northern fishery suffered owing to the American war, and it gradually rose to importance. It consists of two branches:—1st, The capture of the spermaceti whale, the cruising ground for which accords from the meridian of Japan to beyond Australia, and longitudinally from Cape Horn to the Indian Archipelago: the vessels are found and provisioned for three years, the period of their general absence from England: 26, The common black whale of the Southern seas, met with principally on the 8.B. coast of South America. Of lat

Formento. Por. & Sp. Trigo. Ru. Pachenisa), the most valuable of the bread-corns of the temperate zone, is a plant of which there are numerous species; the most important in Britain and Northern Europe being Winter or Lammas Wheat (Triticum hybernum). It is generally sown in autumn, but often in spring,

in which case it is sometimes called spring-wheat. Of this species there are numerous varieties; but they may be divided into two classes, red and white; the former the more hardy, but the latter excelling in the quality of their produce. The best soils for wheat are those which are stiff or clayey. From two to three bushels of seed are required to the acre; and the produce, though very variable, may be held for a fair crop to be 30 bushels per acre. But the average produce of England does not perhaps exceed 22 bushels, nor that of Scotland 25. The weight of the straw is reckoned to be about double that of the grain. An acre, therefore, yielding 25 bushels of wheat, at the rate of 60 lbs. per bushel, would yield 3000 lbs. of straw, or about 26½ owts. (Low's Agriculture.) The average yield of flour is 12½ lbs. to 14 lbs. of grain. In the United Kingdom, wheat is produced chiefly in England, particularly in the counties of Kent, Essex, Suffolk, Rutland, Hertford, Berks, Lincoln, Hants, and Hereford. In Scotland, and especially in Ireland, the climate is in general too cold and moist for the profitable culture of wheat; though, in the counties of Haddington, Edinburgh, Linlithgow, Perth, Forfar, and Stirling, there are extensive tracts distinguished both for the quantity and quality of their produce. [CORN.]

there are extensive tracts distinguished both for the quantity and quanty or their produce. [Coan.]
WHISKY, a spirituous liquor distilled from barley, and called malt or grain spirit, according as more or less of the former is used in the process. Malt whisky is esteemed the best, especially when the distillation is conducted slowly in small stills. This spirit is largely manufactured in Scotland, Ireland, and the United States. The finest is the Scotch, especially that of the Highland distilleries.
WHITEBAIT, a small species of herring (Clupea alba), caught in the Thames below Woolwich, from April to September.
WHITING, a fish of the cod kind (Merlangus Vulgaris, Cuv.), caught in abundance all round our coast. narticularly in January and February.

WHITING, a fish of the cod kind (Merlangus Vulgaris, Cuv.), caught in abundance all round our coast, particularly in January and February.

WINE (Du. Wyn. Fr. Vin. Ger. Wein. It. & Sp. Vino. Por. Vinho. Rus. Wino), is the fermented juice of the grape. The varieties of wine depend chiefly on the quantity of sugar contained in the must, and the manner of its fermentation. When the quantity of sugar is sufficient and the fermentation complete, the wine is generous and perfect; if the proportion of sugar be too small, the wine is thin and weak; if it be too large, part of it remains undecomposed, and the wine is sweet and luscious; and if it be bottled before the fermentation is completed, it will, as in the case of champagne, proceed slowly in the bottle, and on drawing the cork, the wine will sparkle in the glass. When the must is separated from the husk of the grape, before it is fermented, the wine has little colour, and is called White wine. But if the husks are allowed to remain in the must while it is fermenting, the alcohol dissolves the colouring matter of the husks, and the wine

called White coine. But if the husks are allowed to remain in the must while it is fermenting, the alcohol dissolves the colouring matter of the husks, and the wine is coloured; such is called Red wine. Wines besides vary much in flavour; a quality which, in a few kinds, is imparted by nature, but which in the general case is produced by the art of the manufacturer.

The vine is a hardy plant, but agrees best with light gravelly soils, or those abounding in volcanic debris, and a temperately warm climate. In colder countries, the grape-juice becomes too poor, and in warmer too saccharine for wine-making. In Europe, the wine district is comprised between lat. 36° and 51° N., within which limits almost all the wines of commerce are produced; and from whence large quantities are sent to the N. of Europe and to America. In the east, comparatively little is grown or used; being forbidden to the Mohammedans as the cause of "more evil than profit;" and never taken by the Hindoos but as a medicine. In China, rice and palm wine are made in large quantities, but little is made from the grape; though of late they have evinced a taste for European wines, particularly sherry.

DESCRIPTIVE TABLE OF THE PAINGIFAL WINES.

"France is the vineyard of the earth. Her light, yet with sufficient body and spirit. It is

"France is the vineyard of the earth. Her light, yet with sufficient body and spirit. It is fertile soil, gentle acclivities, clear summy ake in the summer temperature, place her, in conjunction with her experience and the advantage of the of science applied to vinification, the foremost in the art of making the junce which so gladdens the human heart" (Redding, pp. 33, 87). Self-science applied to vinification, the foremost in the art of making the junce which so gladdens the human heart" (Redding, pp. 33, 87). Self-science are summant powers than can be explained not in the quantity, of their produce, are those comprised in the ancient provinces of Burgundy and Champagne, whence the wines derive three names.

Burgundy, grown chiefly in the department of Cote d'Or, is a fine dry wine, of the most exquisite delicacy, flavour, and beaquet. It is

paculiar aroma of the wine in an eminent degree. The sparkling is chosen of moderate effervencence; that which merely secame on the surface (desit-mouseaux) being preferred to the full frotting wine (grand-mouseaux); which last also keep worst. Champagne is improved in summer by ice. Also strength, sparkling, 12 per ent.; still, 14 per cent. Sillery is a white still kind of the first class, produced near Rheima. Claret is a name given in England to the red wine of Medoc, in the Gironde, imported from Bordeaux: or more commonly a mixture of that

Claret is a name given in Engiand to the red wine of Medoc, in the Gironde, imported from Bordeaux; or more commonly a mixture of that wine and Beni Carlos, or some other full wine. In France, Clairet is a general name for all rose-coloured wines. When in perfection, claret ahould be of a rich colour; a bouquet partaking of the violet, and of a very agreeable flavour. The prime growths are Laglite, Latour, and Margosus. It is less heating, and more aperient than most other wines; but is comparatively short-lived: it is preferred when about 10 years old. Alc. strength, 15 per cent. Sauterus, a fine dry lightish-brown wine, is also the growth of the Gironde; as are likewise Pontac and Barsac, both durable, dry, and also lightish-brown in colour.

Graves, a class of wines of the Bordelais. The white kinds have a dry filmty taste, with an aroma resembling cloves: the choicest are St. Bris and Carbosusčeux. Of the red kinds Hout Brion ranks highest. They keep for 20 years. Hermitage is grown near Tain on the Rhone. The white variety is of superior quality; it is of a straw-vellow colour, rich tasts, very neculity.

Brion ranks highest. They keep for 30 years. Herwitage is grown near Tain on the Rhone. The white variety is of superior quality; it is of a straw-yellow colour, rich taste, very peculiar colour, and lasts nearly a century without deterioration. The red variety is short lived. Côte Rôte is a red wine, grown near Lyons. Though slightly bitter, it excels in clearness, colour, and perfume.

Rousillon, a class of wines, the best of which have body and fineness, and at first are very sweet and of a deep colour; but in eight or ten years they acquire a golden hue and a delicate agreeable taste. Mackes, one variety, is said to combine in some degree the fulness and vinous properties of Port, with the flavour, aroma, and bouquet which characterize the French wines.

Frontiguess, a museadime wine of Languedoc, occurs both red and white; and will keep about 30 years in bottle: when old it resembles Malaga. Luste, also grown in Languedoc, resembles Frontigness, a rich white museadine, grown near the Pyreness, belongs to the class called in France view de liqueser.

Brain follows France in the excellence of its wines. And from north to south, sites, soils, and exposure of the happiest kind for the vise, and exposure of the happiest kind for the vise,

France visit de liqueser.

Frank follows France in the excellence of its wines. And from north to south, sites, soils, and exposures of the happiest kind for the vine, cover the face of the country.

Exercy, the most important, grown at Xeres mear Cadis, is made both pale and brown. The pale is generally preferred; but "sherries are never to be judged by colour, but solely by taste." When good, this wine has a fine flavour, warm taste, and some portion of the agreeable bitterness of peach-karnels. When new, it is harsh and flery, but is mellowed by being kept four or five years in wood: it does not attain perfection until 15 or 20 years old. When of a due age and good condition it is very fine and wholesome, and free from excess of acid, with a dry aromatic flavour and fragrancy which render it a fit stimulant for delicate stomachs. Of late years its manufacture has been greatly improved,—ale. str. 20 per cent. Amontillado is a rare, dry, delicate kind of sherry.

Paxarette, made near Xeres, from the sherry grape, is a rich cordial malmacy wine, parkling, and of a fight amber colour. Tené, likewise grown near Cadis, is a rich red muscadine, drank generally as a stomachic.

Malaga is a secondary kind, with a peculiar taste, from being mingled with wine burned a little in the boiling. Lagrisson Malaga is made from the droppings of the grape without pressure. Mountain is a sweet variety of Malaga.

Best Carlos is a deep red wine imported from Valencie.

THE SPANISH ISLAND of Majorca, and the Ma-

Bass Carlos is a deep red wine imported from Valencia.

The Spanish Island of Majorca, and the Majorca is a white kind, grown in Majorca; it approaches Sauterne in flavour.

Madeira is a strong dry white wine, uniting great strength and richness of flavour, with a fragrant and diffusable aroma. It is mellowed and improved in flavour by a voyage to india. It is very durable, and indeed is said not to be in condition until it has been 10 years in wood and 20 in bottle. It is highly stimulant, and is well adapted for debilitated constitutions; though in its purest form more said than either port or sherry. Alc. str. 22 per cent. Sercial is a fine kind of Madeira; and Maissey is a very rich luscious species of the highest quality, made from over-ripe grapes. Thato is a red kind, wanting the high aroma of the white sorts, and when old resembling tawny port.

Teneriffe, or Vidonia, is a dry canary wine resembling Madeira, but inferior.

Portugal.—Port, a red wine of the Upper Douro, is, when new and unmired, rough, strong, and sightly sweet; but after being kept in bottle, it loses some of its astringency and most of its sweetness, while its flavour is improved. Being, however, largely brandled, it requires, if imported green, to be kept three or four years in wood, and from four to seven in bottle, before the odour of the brandy is subdued, and the senuine aroma of the wine developed. It is heating, but when of good quality, wholesome; though peculiarly notions when taken in excess. Alc. str. 32 per cent.

Liston is a secondary wine. White Liston resembles inferior Madeira; it is made both dry and muscadine. Red Liston is coarse and dry.

Buccilias, a light white wine grown near Liston, resembles hereas when pure; but, as imported, its fery from sophistication with brandy.

Lisbon is a secondary wine. White Lisbon resembles inferior Madeira; it is made both dry and muscadine. Red Lisbon is coarse and dry. Succles, a light white wine grown near Lisbon, resembles Harsac when pure; but, as imported, it is flery from sophistication with brandy, Carcavellas, also imported from Lisbon, is a tweetish white wine grown near Gira. Figureira, is a strong coarse red wine.

GRAMARY produces little good wine except on the banks of the Rhine (chiefly between Bonn and Mayence), and its tributaries, the Mayn, in Moselle, and Neckar. The growths of these districts, however, form a class of a peculiar and distinct character. They are generous, dry, finely flavoured, and endure age beyond example. They average about 12 per cent. of alcohol. The infevior kinds are naturally acid, but this is not, as is sometimes alleged, the constant character of the German wines. Of the Rhine wines the choicest is Johannisbery, of the Mayn wines, Hockeiss, or, as it is called in England, Hock is the continue of the Neckar wines, Bestingheim.

AUSTALA possessesscarely any but poor wines; but Hungary produces the celebrated

Tokay, a rich luselous wine, of a peculiar aromatic fiavour; it is, however, scarce, dear, and little known in Britain.

ITALY has none of any celebrity except

Lacryma Christi, a first class wine, grown only in small quantities near Naples. It is lusticues, rich, red, and of exquisite flavour.

BICLLY produces and exports wine in abundance; but it is generally of very low quality, and fiery from mixture with coarse brandy.

Mareala or Bronte Madeira, is a dry white wine, of great body, resembling second class Madeirs.

Syracuse, is the name given to a luscious red muscadine; also to a white vin de liqueur.

Aften, the best, is a strong red wine.

Caps or Good Hors. The Cape wines, except Constanta (a rich luscious kind), are of the worst description, being generally infected with the earthy taste common to wines grown on bad soils. Some are sweet, but the larger part are dry. They are called Cape Madeira, Cape Sherry, Cape Hock, &c.

In 1841, the quantity of wine imported into the

ASIA produces no wine for exportation, except perhaps the celebrated Shiras of Persia, some of which is occasionally sent to India.

AMERICA. Wine is made both on the north and south continent, particularly in N. Carolina; in Peru and Chili; and at Mendoza in Buenos Ayres, near the Andes; but none is shipped to Europe.

AUSTALLIA. Some attention is bestowed on wine in the colony of NEW BOUTH WALES. be United Kingdom was 7,708,509 gallons: and

Gry. They are called Cape Haderra, Cape Ederry, leave Sherry, law and the Colony of New Sourze Walks.

In 1841, the quantity of wine imported into the United Kingdom was 7,708,809 gallons: and there were entered for consumption 2,412,821 gallons Spanish; 2,387,017 Portuguese; 363,740 French; 107,701 Madeirs; 85,542 Rhemish (or German); 25,635 Canary; 137 Fayal; 441,338 Cape; and 401,429 Sicilian and other sorts; total, 6,184,950 gallons. On January 5, 1843, there were under bond, 10,775,380 gallons; whereof in London, 6,618,699; and in Dublin, Letth, and other ports, 4,185,811 gallons. The surplus imported beyond the consumption is re-exported chiefly to India and our colonies in Australia and America.

Prior to 1693, the wines of France were those chiefly consumed in this country; but the higher duties imposed on them in that year, and the fiscal advantages given by the Methuen Treaty to Portuguese wines in 1703, led gradually to the former being nearly superseded by the latter and the wines of Spain. And after 1793 (when Britain used about 7,000,000 wine gallons yearly), the consumption of all kinds was checked by the extravagant duties imposed for the prosecution of the foreign sorts; and 2s. 5d. on Cape; and in 1831, when the discriminating duty on French wine was abolished, they were fixed at 5s. 6d. per gallon on all foreign wines, and 2s. 9d. on Cape. Since the reduction in 1826, a considerable increase has taken place in the consumption of sherry.

The Blandard Gauges of wine recognised in trade are—pipe of Port, 115 gals.; pipe of Laps or Madeira, 32 gals.—all Imperial measure.

Farther information will be found under Currous Resoultations, Warriousius Stetzes, and in the articles on the different wine countries; also in the well-known Treatises on Wine by Dr Henderson and Cyrus Redding.

WINTER'S BARK (Wintera aromatica), a spice resembling canella alba.

Henderson and Cyrus Redding.

WINTER'S BARK (Wintera aromatica), a spice resembling canella alba.

WOAD, a plant (Isatis tinctoria), from the roots and leaves of which a blue dye is obtained; but its use is now almost entirely superseded by indigo.

WOOD. [TIMBER.]

WOOL (Du. Wol. Fr. Laine. Ger. Wolle. It. and Sp. Lana. Por. La, Laa.

Rus. Wolna, Scherst), the fleecy covering or pile of the Sheer. Wools are distinguished by their length or staple, and by the fineness of their filaments. Long wool, commonly that which exceeds 3 inches in length, is best adapted for the manufacture of worsted stuffs; while short wool, that less than 3 inches, is chiefly employed for cloths and other articles. These two kinds, which are the produce of distinct varieties of sheen, are also distinguished by the manner in which they employed for cloths and other articles. These two kinds, which are the produce of distinct varieties of sheep, are also distinguished by the manner in which they are prepared for being spun. The long wools, like flax, are combed; while the short wools are carded; whence the former are familiarly termed combing wools, and the latter carding or cloth wools. In England, the chief long-woolled sheep is the Leicester, and the chief short-woolled the South Doson. The fleece of the latter is very fine; it is, however, greatly inferior to that of the Merinocs, a Spanish breed, but which has been introduced with signal success into Germany, Australia, and the Care Colons. and the Cape Colony.

breed, but which has been introduced with signal success into Germany, Australia, and the Cape Colony.

Wool ought to be pilable, elastic, and above all, soft to the touch, a property for which the Baxon wools are noted: the filament too ought to be regular, it should be free from hairs or kessys. Farther, it ought to be curly or crispy, with the peculiar, property of feling. Each fleece contains wool of different qualities; the best is that on the spine and sides. And that shorn from the live sheep, called seces wool, is superior to that cut from its skin after death, called dead wood; the latter being comparatively harsh, weak, and incapable of imbibling the dyeing principles, an objection to which also black wool is liable. The assorting or stapling of wool is cometimes performed by the manufacturer, but chiefly by wool-staplers, who purchase the raw material from the grower, and dispose of it, after it is assorted, to the manufacturer.

The exportation of wool was prohibited in 1860, mainly from a desire to preserve to ourselves the English long wool, a kind not produced in any other country; but this policy was more injurious to the agriculturist than beneficial to the manufacturer, and the improvements in machinery having enabled short wools to be applied to many of the purposes for which long wools had been appropriated, the prohibition was withdrawn by Mr Hunskisson in 1825. Since then, the exports of British wool have gradually increased, and in 1841 amounted (exclusive of yarn) to 8.471,235 lba., of which 7,544,195 lba. went to Belgium, and 894,704 lba. to France.

The importation of foreign wool into Britain was free until 1802, when it was subjected to a duty of 5s. 3d. per cwt.; which was gradually raised to 6s. 8d. in 1813; and in 1819 (by Mr Vanstitari) to 56s. per cwt.; which was gradually raised to 6s. 8d. in 1813; and in 1819 (by Mr Vanstitari) to 56s. per cwt., or 6d. per lb. This extravagant rate was gradually reduced in 1894 and 1835 to id. per lb. on wool under la per lb. in value, and to

Portugal, 679,071 lba.; Spain, 1,088,200 lba.; Italy, 1,502,254 lba.; Turkey, 447,563 lba.; Cape Colony, 1,079,910 lba.; India, 3,002,664 lba.; New S. Wales, 7,933,060 lba.; Van Diemen's Land, 3,507,531 lba.; S. Australia, 759,909 lba.; La Piata States, 5,105,637 lba.; Peru, 3,144,462 lba.; Chili, 993,389 lba.; making, with small quantities from other places, in all, 56,179,541 lba. The quantity entered for home consumption was 52,869,020 lba.; namely, 29,061,795 lba. at duty of ld. per lb., 14,495,009 lba. at \$4.06,4305 lba. red wool at 60. per lb. do., and 16,3196 lba. colonial wool, duty free. The surplus imported was re-exported to Belgium, France, and the United States. The Peruvian wool, it may be observed, is mostly that of the alpaca, a species of llama.

The sack of British wool of 2 weys, or 13 tods = 354 lbs. The last is 12 sacks. And the pack = 240 lbs. The German bale weighs about 350 lbs. See SUPLIMENT.

WOOLLEN MANUFACTURE. This art existed in England at a remote period, but in a rude state, as a great part of the raw wool produced in the kingdom was exported to Flanders in exchange for the finer cloths, down to the reign of Edward III., when the manufacture received an impulse from the immigration

dom was exported to Flanders in exchange for the finer cloths, down to the reign of Edward III., when the manufacture received an impulse from the immigration of a number of weavers from Ghent. Numerous laws were afterwards passed for its regulation; including among others the prevention of the exportation of British wool, the confinement of the art to certain localities; and the prohibition of the use of machinery. These laws, though in course of time abolished, materially retarded the manufacture. The statute of Edward VI. discouraging machinery, only repealed in 1807, was so effectual a bar to improvement, that until nearly the end of last century, the several processes were conducted in the same barbarous manner as in the reign of Edward III. Since 1807, a variety of machines have been applied to the carding and spinning of wool; while the power-loom has been employed in the weaving. The repeal of the prohibition to export British wool, which was not effected until 1825, by allowing the French to procure the long staple wool of England, at first enabled them to produce new stuffs superior to any that we had ever manufactured; but this superiority was not of long continuance. Stimulated by competition, our manufacturers in a few years introduced improved processes, which enabled them to produce merinos and other stuffs in every respect equal to those of France. And in the course of the ten years following the removal of the restriction, their exportation of such goods, instead of de-

every respect equal to those of France. And in the course of the ten years following the removal of the restriction, their exportation of such goods, instead of declining, increased to the extent of 50 per cent. (Porter's Progress of the Nation, p. 190). Three great divisions of the trade are commonly recognised,—the manufacture of woollen cloth, of worsted or stuff articles, and of hosiery. And the chief districts in which they are pursued are as follow:—Woollen cloth in the West Riding of Yorkshire, Gloucestershire, Wilts, and Somerset; stuffs or worsteds at Bradford, Halifax, Leeds, and in Norfolk; hosiery in Leicestershire; woollen yarn in Suffolk and Lancashire. Besides which, carpats are made at Kidderminster.

Halifax, Leeds, and in Norfolk; hosiery in Leicestershire; woollen yarn in Suffolk and Lancashire. Besides which, carpets are made at Kidderminster, Wilton, and Axminster; and tweeds, plaiding, and woollen shawls, in Scotland. The English cloth manufacture is carried on generally in three ways. 1st, The domestic system, under which there is a number of small masters, mostly occupying little farms, 2d, Under the master-clothier system of the West of England, where one individual purchases the wool and gives it out to distinct classes of manufacturers to be worked up. 3d, Under the factory system, where one individual employs a number of workmen under his own superintendence. Nearly three-fourths of the whole woollen manufacture is located in the West Riding of Vorkships where the goods are chiefly sold in an underseed state in while halls Yorkshire, where the goods are chiefly sold in an undressed state in public halls in the principal towns. A considerable quantity is also purchased in the different districts by drapers, who give out samples to the manufacturers, and get the cloth sent direct to their warehouses. The woollens of Norfolk and the West of England are generally sold at fairs or markets, or to parties sent round by the drapers.

The annual value of the manufacture in 1698 was estimated at £6,000,000; in

The annual value of the manufacture in 1698 was estimated at £5,000,000; in 1741, £8,340,000; in 1774, it was, according to Arthur Young, £12,794,877; and in 1800, according to Mr Luccook, £17,500,000. In 1834 it was estimated by Mr Youatt as follows: 108,000,000 lbs. of British wool at 1s. 3d., and 46,535,232 lbs. of imported wool at 2s. 6d., £12,556,904; wages of 350,000 persons at £25 each, £8,750,000; dyes, oils, and other raw materials, £1,450,000; wear and tear of fixed capital, profits, &c., £4,250,000; total, £27,006,904. But, since 1834, a considerable fall has taken place in the price of raw wool.

The sale of woollens was long confined to the home market. And it was not

The sale of woollens was long confined to the home market. And it was not The sale of wooliens was long commed to the home market. And it was not until the beginning of last century that the exports to the continent and to our colonies became of importance. The value of woollens exported was in 1700 nearly £3,000,000; and in 1800 about double that sum. Their value has not since increased; but, owing to the diminished price of wool, and the greater economy in the various manufacturing processes, the quantities have on the whole considerably increased. At present, the most prosperous department of the trade is that in worsted and stuff goods. Of late years, cottons have, from their cheapness, in a great degree superseded the lower qualities of cloths; a circumstance which, joined to the increasing rivalry of France, Germany, and Belgium, renders it improbable, unless new markets shall be opened in China or elsewhere, that much extension

unless new markets shall be opened in China or elsewhere, that much extension will in future be given to our manufacture of woollen cloths.

In 1941, exports consisted of 213,195 pieces cloth; 11,491 pieces napped coatings, duffles, &c.; 22,131 pieces kerseymeres; 37,160 pieces baize; 2,007,366 pieces woollen or worsted stuffs; 1,820,244 yards flammel; 2,167,329 yards blanketing; 599,315 yards cappeling; 5,015,067 yards woollens mixed with cotton; 135,990 yards stockings; and £163,900 in value of tapes, small wares, &c. The total declared value was £5,748,673; whereof the United States took £1,521,990; Germany, £383,975; Holland, £316,769; Belgium, £10,792; Russin, £10,732; Portugal, £164,251; Italy, £203,797; Gibraltar and Spain, £182,603; India and China; £532,710; Australia, £91,851; British America, £515,344; Brazil, £329,984; Mexico and South American States, £463,070; and the remainder in smaller quantities to different places. The above was exclusive of 4,903,291 lbs. yarn, mostly to Germany. S

WORMSEED, the unexpanded flowers and calyxes of a species of Artemisia.

They are imported from the Levant and Barbary, and are used in medicine.

WORMWOOD, a perennial herb (Artemisia absinthium), indigenous to Britain,

celebrated for its intensely bitter, tonic, and stimulating qualities.

YARD, the British standard measure of length. [Measures.]
YARN (Fr. Fil. Ger. Garn. It. Filato. Por. Fio. Rus. Prasha. Sp. Hilo), simple spun thread. Its quality is expressed in England by numbers, denoting the number of hanks in an avoirdupois pound weight; reckoning the length of the hank of cotton yarn at 340 yards, or 7 leys of 120 yards each. The hank of worsted yarn is sometimes counted in the same way, but more generally at 560 yards, or 7 leys of 80 yards each. Linen yarn is estimated in England by the number of leys or cuts, each of 300 yards, contained in a pound; but in Scotland by the number of pounds in a spindle or 48 leys: thus, No. 48 in England is called 1 lb. yarn in Scotland. See YEAST, or BARM, a product of the fermentation by which beer is made; upon the surface of which it swims from involving bubbles of carbonic acid gas. It may be obtained in the form of a firm paste. Mixed with moistened flour it excites the panary fermentation, and is thus used for making bread.

panary fermentation, and is thus used for making bread.

ZAFFRE, an impure oxide of cobalt, prepared by calcining its ores, and mixing the product with about twice its weight of finely powdered flint. It is used for communicating a blue colour to glass, porcelain, and earthenware; and, when roasted with potashes, washed, and pulverized, forms Smalts. About 2600 cwts. are annually imported from Norway and Germany.

ZEALAND, NEW, a group of islands lying in the Pacific, 1800 miles S.E. of Australia. They are subject to Britain; and in 1841 were placed under a governor and council.

There are two principal islands, separated by Cook's Strait—New Ulster and New Munster. The latter, and the greater part of the former, are intersected by a mountain-chain, elevated in some parts 14,000 feet; and there are several subordinate ranges. The country generally is well watered, wooded, and fertile; and the climate salurious and temperate, resembling that of France. New Ulster alone—the N. island—has been colonized by the British. Auckland, the capital, advantageously situated on its N. W. side, on the Wattemata, in lat. 36° 31° B, long. 174° 40° E., is rapidly rising into importance, and has a spacious harbour. Russell, towards the N. E. extremity, on the Bay of Islands, and Wellington, on the S. on Cook's Strait, are the other principal stations. Timber and flax are at present the chief products; but as colonization is progressing rapidly, and the natives evince an aptitude for civilized usages, little doubt can be entertained that these fine islands will become ere long the sites of an extensive comment. A strain of the products is progressing rapidly. The Research of the products is progressing rapidly, and the natives evince an aptitude for civilized usages, little doubt can be entertained that these fine islands will become ere long the sites of an extensive comment. A supplication of the products is progressing rapidly. The supplies of the products is producted to the products in the products of th

entertained that these fine islands will become ere long the sites of an extensive commerce.

ZINC, on SPELTER (Fr. Zinc. Ger. Zink. It. Zinco. Chin. Pi-yuen), a
metal of a blueish-white colour and lustre. Sp. gr. 7. At common temperatures
it is tough and intractable; but heated to between 220° and 320° it becomes malleable and ductile; so that it may be hammered out, rolled into sheets and leaves,
and drawn into wire. Being cheap, light, and a metal which, when superficially
oxidized, long resists the further action of air and water, it is now employed as a
substitute for lead in lining water citerum and roofing: allowed with conner it substitute for lead in lining water cisterns and roofing; alloyed with copper it forms brass; and several of its compounds are used in medicine. Zinc is obtained either from calamine, a native carbonate, or blende, a native sulphuret. Both are found in this country, especially in Flintshire and Derbyshire. But British zinc is inferior to that of Germany, from whence, chiefly by way of Prussia and Hamburg, from 100,000 to 170,000 owts, are annually imported (commonly as ballast in shirs bringing woully of which about 80,000 ways are entered for home consumpships bringing wool); of which about 80,000 cwts. are entered for home consumption, and the rest is re-exported, mostly to India,

SUPPLEMENT.

AGA

ALP

AGAL-AGAL. This is usually written Agar-agar. It is the Sphaerococcus spinosus of Agardh. A large trade is carried on in this prepared seaweed in the East, from Singapore and the Eastern Archipelago generally to China.

It is used not only for food but as a stiffening material for paper and fabrics.

ALGERIA. The total population in 1854 was 2,056,298 natives in districts

under military government; Civil Europeans, 155,607, and about 70,000 mili-The custom duties and navigation dues received in 1854 amounted to 11. The number of vessels entered at ports of Algeria was 6817, regis-£102,111. tering 437,912 tons, of which 1417 vessels were from French ports, 1712 from foreign ports, and 3688 employed in the Algerian coasting-trade. The value of the total imports in the same year was £3,249,373, and of the exports £1,687,043. There were in all 1,903,675 acres under cultivation with grain, which produced 25,772,000 bushels, valued at £5,509,753. In 1853 there were 1688 tobacco-planters, cultivating 2287 acres of land, the produce being 1,637,523 kilogrammes of tobacco, valued at 1,435,226 francs.

Of alkali and barilla we imported 908 tons in 1858 from the Two Peru. ranging in price from £17. 10s to £19. 10s. The aggregate ALKALI. Sicilies and Peru, ranging in price from £17. 10s to £19. 10s. The aggregate value was £14,216. The average imports of the four years ending 1858 were

about 1200 tons.

ALMONDS. The trade in this shelled-fruit has largely increased. In 1858 the total import of sweet almonds was 88,106 cwt., of the computed value of £98,532., upon which a duty of 10s per cwt. was paid, and 12,140 cwt. were retained for home consumption. The Spanish almonds were valued at £4.7s2d per cwt.; those brought from Gibraltar at £5.13s per cwt. Of bitter almonds 8370 cwt. were imported in the same year, valued at £3. per cwt., which came

ALOES. The average annual imports of this drug have been lately on the increase. Previous to 1850 they scarcely averaged 180 tons; in 1858 they reached 265 tons. The bulk of this comes from Southern Africa and the East Indies. The average price fixed for the value was £1. 12s 8d per cwt. for Cape aloes, £6. 16s 6d for Barbados, and £7. for Socotrine.

ALPACA, the name of a species of Peruvian sheep; also of its wool, from which a fabric has been manufactured of great variety and utility. The alpaca is hardy, can feed on the refuse herbage left by other animals, and though smaller in size than the llama, is like it, used in Peru to carry burdens. Nine-tenths of its wool is black, the rest brown or grizzled. The staple is of extra-ordinary length, of a singularly soft and silky quality, and when carefully managed loses nothing of its gloss, in dyeing and finishing. The use of it has rapidly extended in the worsted manufactures of Yorkshire, especially by improved processes. The quantity of the wool imported from 1836, when Mr. Salt of Saltaire made his first purchase, to 1840, averaged 580,000 lbs. per annum. In 1851 the import had reached 2,186,480 lbs.; and the advance in price had risen from 10d per lb. in 1836 to 2s 6d per lb. in 1852.—See Wool.

Nearly contemporaneous with the introduction of alpaca wool was the bringing into general use in Yorkshire of an article similar in many of its properties,

namely, mohair, or goat's wool. This article is of very ancient use in manufactures, having been employed, as we are taught in the Book of Exodus, for the furniture and covering of the Jewish tabernacle. The wool is grown in the neighbourhood of Angora, in the centre of Asia Minor, and is brought from thence on the backs of camels to Constantinople for shipment. Although many attempts have been made to extend its growth beyond this immediate district, they have hitherto generally failed. Formerly, yarn was spun by hand in Turkey itself to a large extent, and exported to France; but English spun mohair yarn has now entirely superseded it. The export of this yarn to France in 1850 amounted to 400,000 lbs.; and in Germany its consumption is greatly increasing. It is manufactured in Yorkshire, chiefly into articles for ladies' dresses, of great softness, lustre, and brilliancy. On the Continent, and in some parts of England, there is a large and increasing production from this article of what is called Utrecht velvet, for hangings, furniture, linings of carriages, &c.

ALUM. About 13,000 tons of alum are made in the United Kingdom, which, at an average of £8. per ton, makes an aggregate sum of £104,000 per annum. In 1858, 1453 cwt. of alum and 1115 cwt. of roche alum were imported, worth together £1156. The exports of alum in the same year amounted to

70,000 cwt. of the value of £29,735.

AMBERGRIS. The imports of ambergris are very small, only amounting to a few ounces a year. In 1858, 120 ounces were brought in of the value of £211

ANCHORS. With the extension of shipping in all parts of the world, the demand for anchors increases; and as the vessels now built are usually of a much larger tonnage than formerly, heavier anchors and more of them are required. One anchor is considered necessary for every 20 tons. The aggregate manufacture must be very large, seeing that besides those required for our own mercantile and naval vessels, 16,772 tons of anchors, grapnels, &c. valued at £261,500, were exported in 1858.

ANIML In 1858 the imports of this resin were 2623 cwts., chiefly from the west and east coasts of Africa, of the aggregate value of £18,229.

ANNATTO. The imports of this colouring substance were 3835 cwts. in 1858, valued at £11,846. The duty was removed in 1845.

APOTHECARY'S WARES. Under this designation various otherwise unde-

scribed and unenumerated articles of drugs, &c., are annually shipped from this country to the value of about half-a-million sterling.

APPAREL. Under this heading, ready-made clothes, old and new, are shipped to the value now of about £2,500,000. annually, exclusive of about £400,000 slops and negro clothing. The largest portion, upwards of £1,000,000, goes to Australia.

ARGOL. The crust or sediment of wine vats. The imports have been largely on the decrease of late years. In 1854, 30,000 cwts. were imported; while in 1858, but 13,544 cwt. were received. It comes chiefly from the Mediterranean and Peninsular ports.

ARMS AND AMMUNITION. The exports under this head have increased of late years beyond the sum mentioned at page 354. It comprises the two items of guns and gunpowder: the average value of the ten years ending 1858 was £600,000, about half of which amount was guns and half gunpowder.

ARROWROOT. The imports of this starch for food are now very large.

In 1858, 27,324 cwts. were imported, and nearly all entered for home consumption. The aggregate value was stated at £64,359. The duty has been 44\(\text{por} \) cwt. since June, 1853. St. Vincent, Barbados, and some other of the West India islands, furnish the chief supplies. The manufacture, however, is extensively carried on in Natal, Sierra Leone, Penang, Brazil, and other quarters.

ASPHALTUM. This bituminous substance, when of a good and pure chacter, is much used as a black coating or varnish. The imports in 1858 racter, is much used as a black coating or varnish. The imports in 1858 amounted to 2232 tons, of the value of about £20,000. Some came from Cube, valued at £7. per ton; the bulk from the south of France at £9.; and the best or Egyptian qualities were worth £14. 10s 6d. There is no duty levied on it. · AUSTRIA. The population of the Austrian empire in 1855, exclusive of the military was 39,411,309, and the total area 243,472. The revenue in 1856 was £27,316,227, and the expenditure £33,551,594. The public debt stood at £241,700,000. The total number of merchant vessels that belonged to Austria at the commencement of 1857 was 651 sea-going vessels of 233,973 aggregate tonnage, with 6804 men as crews; and 2742 coasting vessels of 88,837 tons, with 10,153 crew. The value of the imports of the empire in 1855 was £23,646,491, and of the exports nearly the same. In 1853, 5,400,000 cwt. of beet-root sugar was made in Austria. In the same year there were 1000 miles of railway in operation, and 39,000,000 passengers were conveyed over them; 694,230 cwt. of tobacco was consumed. The number of foreign vessels that enter and clear at the port of Trieste is about 2500, but the number of British vessels engaged in the trade has been declining, now scarcely numbering 100. The value of our imports from Austria range from three quarters to one million sterling per annum, and the exports of British manufactured goods sent in return, are to the value of one million. The transit trade of goods through Austria to Turkey and other countries has been to the value of £14,500,000 per annum. A very large proportion of the trade of Anstria passes the frontiers of the neighbouring German States, from whence the imports have been increasing in importance of late years although the exports to them have been more stationary. Of about 140,500,000 acres, the computed extent of the Austrian Empire, there were in 1851:-

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In forest
In pasture .
In meadow and garden
In arable land .
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The agricultural produce that year was: wheat, 67,679,000 bushels; rye, 99,000,000; barley, 740,600,000; oats, 131,567,000; maize, 56,000,000; rice, 1,500,000; other kinds of grain, 170,000,000; pulse, 11,000,000; potatoes, 142,500,000 bushels; wine, 622,500,000 gallons; tobacco, 845,507 cwts.; flax and hemp, 3,098,000 cwts.; linseed, 579,253 cwts.; hops, 72,599 cwts.; olive and seed oil, 547,278 cwts.; wool, 444,568 cwts. The consumption of best root in the sugar factories in 1853 was 5,360,055 centners, of 123 bs. each.

The live stock comprised 3,230,000 horses; 116,210 mules and asses; 3,795,348 bulls and oxen; 6,615,136 cows; 16,801,545 sheep; 2,275,900 goats; and 7,401,800 swine.

Wool is a very important item both of import and of export in Austria, the coarser sorts being imported in large quantities chiefly from Russia; while the finer kinds for the most part grown in Hungary, form one of the chief staples of that country, and are annually exported to a far greater extent than that of the imported, to supply the manufactories of the States of the Zollverein, of France, and of Belgium. From 1831 to 1840 the annual importation of wool did not quite amount to 50,000 cwts., and from 1841 to 1850 it did not rise beyond 63,000 cwts., but in 1851 it was 101,800 cwts., in 1852, 135,500 cwts., and in 1858, 120,800 cwts. In 1854 the blockade of the Russian ports having stopped the usual outlets for the wool of that country, a large quantity was furnished to Austria, and the import then rose to 291,800 cwts. In 1855 it was 210,730 cwts., and in 1856 it fell to 184,220 cwts.

Flax and bemp, from 1841 to 1850 were annually imported to the extent of about 176,060 cwts. In 1854, owing to the failure of the crop of the preceding year, the quantity was only 91,100 cwt. In 1856 the importations rose to 207,100 cwts., a large proportion being Roman hemp, and exceeding the quantity

exported by 160,000 cwts.

AZORES. The entries of vessels at the ports of the Azores in 1856 were 685, of 91,905 tons. The value of the cargoes brought in ranges from £200,000 to £400,000 in value, and of those cleared from £300,000 to £430,000. The imports into the island of St. Michael in 1857 were valued at £131,684, of which £59,600 was from Great Britain. The exports from this island in the same year comprised among other products, 120,788 boxes of oranges, valued at £78,290; 2604 quarters of wheat, 1830 of Indian corn, and 14,670 of beans, together valued at £113,000.

BADEN. This Grand Duchy has a superficies of 278 geographical square

miles, and its inhabitants in 1858 were calculated in round numbers to be 1,380,000. A third of the superficies is arable land, another third is covered with forests, and the remaining third with gardens, fields, pasture lands, &c.
The grain crops are valued at about £41,000,000; pulse and root crops, £1,000,000. The most important plant is tobacco, which during the last fifteen years has been cultivated with the greatest success. The total quantity raised is now about 180,000 cwts. Considerable quantities of this tobacco are exported to the Zollverein and other countries, such as Austria, France, Spain, and North America. In 1856 the tobacco crop was valued at £385,000. The cigar manufactories employ a considerable number of workmen, particularly those of Mannheim, Rauenberg, Leimen, and Sandhausen. One factory alone gives employment to several hundred workmen, and produces annually 20,000,000 eigars. The cultivation of the vine has made during the last twenty years very remarkable progress. The finer sorts of wine begin to rival the best growths ("Crus,") of France and of the Lower Rhine, which is evident by the daily increasing exportation of these wines to Switzerland, Northern Germany, Holland, England, and also to North America. In good years the wine crop represents annually a value of £1,000,000. The best growths are those of the Tauber, Wertheim, Ortenan, Lake of Constance, and Margrafter. The Grand Duchy possessed in 1858 no less than 600,000 cattle of all sorts, 70,000 horses, 200,000 sheep (the greater part with fine wool) 24,000 goats, 500,000 pigs, 15,000 beehives, 14,000 donkeys, and more than 20,000,000 poultry, comprising geese, turkeys, ducks, fowls, pheasants, &c. The number of manufactories in 1849 was 335, employing 17,105 workmen. During the last ten years this number has been augmented by several large establishments. The most important manufactory is at Ettlingen, near Rastadt; shirtings and cotton velvets, consuming annually at least 2500 bales of cotton, and employing constantly 1800 workmen. There are 980 power looms, 50 hand looms, 250 for cutting the velvet, and 2800 mule jennies. The manufacture of beet root sugar at Waghausel, near Bruchsel, is one of the largest in the Zollverein. More than a million of quintals of beet root are annually made into 60,000 to 80,000 quintals of sugar; the number of workmen constantly employed is 560, but during several months of the year it increases to 2,200. The manufacture of wooden and musical clocks, employed in 1855 no less than 1570 master workmen, and three times that number of common workmen. The clocks made in the Black Forest are known and appreciated as much for their cheapness as for their excellent construction, in every country where clocks are made use of. The total value of the clocks sold exceeds £1,000,000. This trade is, however, now subject to a severe competition, in consequence of the rapid progress which a like industry has made in North America, where it is carried on by natives of the Black Forest and others. Each of the 270,000 families of the Grand Duchy consumes per year 232 lbs. of meat of all sorts. If we calculate the net revenue raised in middling years from agriculture, forests, and mines, we find a total of nearly 44,000,000 florins, or a gross revenue of 110,000,000 florins, £19,166,667. One cannot too much admire the intelligent perseverance which the Government has manifested for many years past, by accelerating and extending its river and land communications. From the years 1831 to 1854, £2,728,750 have been expended in the construction of new roads and in altering and improving old ones, in repairing the banks of the Rhine and other rivers, and in constructing ports, &c.; independent of £3,400,000 which the construction of the railroad and telegraphs had cost the Government. The Government of the late Grand Duke Leopold expended no less than £7,916,667 during this period of twenty-four years, in order to give to the country the advantages of a perfect system of locomotion appropriate to the necessities of the times.

BALANCE OF TRADE. A very great improvement has been made in the mode of keeping the public accounts since the remarks in the body of this work were published. Dating from 1854, the Statistical Department of the Board of Trade have published the computed real value of the imports and the declared value of the exports; so that now a more correct approximation can be made of the extent and character of our trade inwards and outwards.

The official and real values of exports once bore very nearly the same proportion to each other which it appears the imports still do—the real value or money-price being about a fifth or a sixth more than the official value, as might be expected to be the case when the official columns were measured by the prices in 1694. But the comparative amount of these ratings at once and suddenly changed in 1819: in that year the real value of exports suddenly sunk below the official, and this difference has gone on continually increasing up to this hour, when it has become perfectly enormous. I may refer to the following figures, taken from the Parliamentary returns, for the proof of this startling observation:—

Table showing the official and declared value of Exports of Great Britain and Ireland in the undermentioned years.

	Official value of Exports.	Declared value of Exports.	Official value of Exports.	Declared value of Exports.
1813 .	. £34,207,258 .	. £45,494,219	1821 . £44,236,533 .	. \$36,968,964
1814 .	42,875,996 .	51,603,928	1822 . : 43,814,372 .	. 85,458,048
1815 .	. 85,717,071 .	41,617,873	1847 126,180,986 .	. 58,842,377
1816 .	. 41,111,427 .	. 41,761,133	1848 132,617,681 .	. 52,849,445
1817 .	. 42,700,521 .	. 46,608,249	1849 164,589,504 .	. 68,596,025
1818 .	· 33,534,171 .	. 35,208,821	1852 109,831,158 .	. 78,676,854
1819 .	. 38,395,625 .	. 86,424,652	1855 258,413,804 .	95,688,085
1620 .	. 40,831,744 .	. 26,659,630	1858	. 116,608,756

So that while before 1819 the official value of the exports was always below their real value; since that year, while the official and real value of the imports has preserved the same proportion, that of the exports has so enormously changed that the official value is now to the real—that is, the money received for them—as 305 to 116! There has been some powerful cause at work to have suddenly produced a change so prodigious. I leave it to statistical philosophers to say what that cause is.

The difference, and it is a most important one, probably arose from this,—that the official valuation of both imports and exports was made in 1694; but the former consists chiefly of raw produce, such as corn, cotton, and the like, as to which the application of machinery and the division of labour, as well as the change of our currency, have had comparatively little influence; while the exports are, for the most part, of manufactured goods, on which capital, machinery, and a contracted currency have had an immense and decisive influence. The returns since 1854, when the real value of the imports was first ascertained,

prove this decisively, for they are as follows:—

	Imp	ORTS.	Exports.		
Years.	Official	Real	Official	Real	
	Value.	Value.	Value,	Value.	
1854	124,136,018	152,889,058	214,071,842	97,184,726	
1855	117,284,881	148,542,850	226,198,262	95,688,065	
1856	181,987,768	172,544,154	258,305,458	115,826,948	
1857	136,215,849	187,844,441	253,296,718	122,066,107	
1858	138,159,144	163,795,803	805,512,708	116,608,756	

The columns of exports here are of the British produce and manufactures only, both in the official and real columns, because it is there that the prodigious change, as compared with the imports in the same years, has occurred. The colonial produce exported bears in real and official value, much the same proportions as the imports.

Although the *afficial* value of imports does not afford an exact test of their real value, yet it affords a close approximation to it, differing only in the real value being somewhat greater than the official; whereas the official returns of exports for the last thirty years exhibit returns enormously at variance with the real value,—the real being eighty or ninety per cent. below the official, which difference is yearly increasing with the fall in the money value of our exports. Fortunately this is now placed beyond a doubt by the returns of the real value of import, which, since the year 1854, have been made up in consequence of Mr.

Porter's representations of the deceptive nature of the official returns of exports and imports considered as a test of their real value. The following are the returns of the official and declared (or real) value of both exports and imports since the improvement recommended by Mr. Porter came into operation, in

True Balance of Trade as shown by the Real and Declared Value of Exports and Imports, 1854-58.

		Expo			
Years.	Imports, Real Value.	British Produce and Manufacture.	Foreign and Colonial Merchandise.	Total Exports.	Balance <i>against</i> England.
1854	159,389,058	97,184,796	19,636,866	115,821,092	86,567,961
1855	143,542,850	95,688,065	21,003,215	116,691,300	26,851,550
1856	172,544,154	115,826,948	23,393,405	139,220,858	53 ,823,801
1857	187,844,441	122,066,107	24,108,194	146,174,301	41,670,140
1856	164,583,832	116,608,756	98,174,098	139,782,779	24,801,053
1000	<u> </u>	! ; · · · ·	nd in five years		\$168,714,50

This is the state of the fact, established by the decisive evidence of the returns of the real value of the imports and exports, as now ascertained since the real value of the former has been entered according to Mr. Porter's suggestions.

It has generally been considered that to carry on a profitable commerce, the balance of trade, as it is termed, should be in our favour; that is, that the value of the goods exported should be greater than those imported. But there are several matters which are generally overlooked in the estimate. 1st. Great Britain is the entrepot or port of receipt for most of the goods of foreign produce intended for the continent and other quarters. Large cargoes come here for orders, or are stored or landed to be transhipped. 2ndly. We now do most of the carrying trade of the world, and large profits are therefore made by our merchants and dealers on freights, insurance, commission, and brokerage. Articles of foreign merchandise imported for re-export, as well as those worked up in manufactures, are therefore indirectly beneficial to our commerce.

BANKRUPTCY.—A short Act was passed (20 and 21 Vict. c. 60), 13th August, 1859, to amend the Irish Bankruptcy and Insolvency Act, which recites that "Whereas by the Irish Bankrupt and Insolvent Act, 1857, unclaimed dividends made before the passing of the said Act are exempted from the operation of its two hundred and ninety-fourth Section, but no provision is thereby made for the disposal of such unclaimed dividends, and it is expedient to amend the said Act by supplying the said omission: be it enacted by the Queen's most excellent Majesty, by and with the advice and consent of the Lords spiritual and temporal, and Commons, in the present Parliament assembled, and by the autho-

rity of the same, as follows:—
"The Court may order that dividends which had been declared before the passing of the said Irish Bankrupt and Insolvent Act, 1857, and which have remained unclaimed for the space of three years from the declaration thereof, shall be divided and paid amongst the other creditors, in manner provided by the Sixth of William the Fourth, Chapter Fourteen, Section One hundred and twenty-eight. "The said recited Act and this Act shall be treated and construed as one Act."

According to an estimate made by Mr. Perry, the careful compiler of the Bankrupt and Insolvent Weekly Gazette, the number of compositions and assignments, and arrangements out of Court may be taken at 10,000 to 12,000 annually, and the number of estates administered in bankruptcy does not exceed 1000.

The number of flats issued in England and Wales, was in 1832, 1700, and in 1883, 1283; at about which number it remained until 1837, when it rose to 1939. This great increase consisted almost entirely of country flats, which rose from 724 to 1408. The number of town fiats did not exceed the average of the preceding 4 years. In the five years ending July 5, 1848, the number of certificates respectively granted, by the five Commissioners of the London Bankruptcy Court were as follows:

	Evans.	Fonblanque.	Fane.	Holroyd.	Goulburn.
First-class Certificates	17	81	161	51	47
Second-class ,,	283 18	251 177	245 169	230	167 48
Third-class ,, Certificates suspended	140	134	40	55 152	227
Certificates refused	9	5	iŏ	10	3
Adjournment of Bakrpts'.		1			
Examination, sine die	56	1 49	81	184	134

The number of sittings held before each London Commissioner in the four years ending 1859, under the arrangement clauses of the Bankrupt Law Consolidation Act, 1849; the Joint Stock Winding-up Act, and the 7 and 8 Vict. c. 70, was as follows:—

	Evans.	Fonblanque.	Fane.	Holroyd.	Goulburn.	Total.
Arrangements - Joint-Stock Comps. Act 7 and 8 Vict, c. 70 -	161 27 28	239 57 16	219 56 17	177 58 2 0	210 19 24	1008 217 100
Total	211	812	292	255	258	1323

In the District Courts of Bankruptcy the returns were:-

	Manchester.	Тачегрооц	Birmingham.	Newcastle- on-Tyne.	Bristol.	Leeda	Exeter.
Arrangements. Joint Stock Comps. Act. 7 and 8 Vict. e. 70.	170 nIL nil.	158 5 nil.	648 17 16	84 nil nil	41 18 17	37 1 8	6 19 nil.
Total	170	163	681	84	76	41	25

The average number of public sittings in Bankruptcy in the London Court in

the 6 years ending 1859 were 4322, and private sittings 2903.

An official return published early in 1860, shewed that the total amount of monies paid into the Bank of England to the credit of the Accountant in Bank-ruptcy, on general account of Bankrupt's estates, for the year 1858 was £1,431,717, by official assignees and others, £48,187 of sale of stock from Bankruptcy Fund Account. There was paid out by order of the Lord Chancellor for investments, £110,000, and by order of the Commissioners, £483,804. The amount transferred as dividends was £1,000,851, and paid out as dividends in the year was £976,539. On the unclaimed dividend account there was paid in £1500, and paid out for investment £1600. There was paid into the Chief Registrar's Account by assignees, &c., £43,532, interest on stock, £49,606, by Commissioners of Inland Revenue, £21,201. The net balances standing on the 1st January, 1859, were in the General Bankrupts' Estates Account, £12,124 in cash, £36,532 in stock, and £93,200 in Exchequer bills. In the Bankruptcy Fund Account £1,579,822 in stock. In the Unclaimed Dividend Account £223 in cash and £9146 in stock. In the Chief Registrar's Account £13,623 in cash and £9146 in stock.

The general expenses incurred were, in salaries, £54,456, compensations in London, £8124; in the country, £9221; retiring annuities, £3798; expenses and travelling, &c., £8437, surplus monies invested in stock, £30,000, total, £114,106. The salaries of the five London Commissioners are £2000 a year, of the ten Country Commissioners, £1800; of the London Registrars £1000,

and of the Country Registrars, £800. The Accountant has £1500 and his chief clerk £800. The Master has £1200. The ushers in London have salaries of £100, and in the country of £80.

In 1857, there were 30 failures reported in Canada East, with liabilities amounting to 1,790,000 dol.; in 1858, there were 62 failures, with liabilities of 1,726,810 dol. In Canada West, in 1857, there were 184 failures, with liabilities of 4,886,000 dol.; in 1858, there were 251 failures, with liabilities of 1,689,255 dol. For the purpose of comparison with these figures, it may be added that the reported failures in New York City in 1857, were 915, with liabilities of 135,129,000 dol.; in 1858, there were 406, with liabilities of 17,773,462 dol. The total reported failures throughout the United States and the British Provinces, in 1857, were 5.118, with liabilities of 299,801,000 dol.; in 1858, the failures were 4,537,

with liabilities of 100,187,571 dollars.

In the annual circular of Messrs. Dun, Boyd, and Co. mercantile agents, New York, it is stated that the number of failures in the United States in the year 1859 was 3918, involving liabilities of 64,294,000 dol. This is a decrease in the number of failures since 1858 of 312, and in liabilities of 31,455,662 dol. Of the failures in 1859, 123, with liabilities of 4,759,000 dol. occurred in Boston, and 160, with debts to the extent of 1,927,000 dol., in the rest of Massachusetts; 61, with liabilities of 1,159,000 dol., occurred in Maine; 25, with liabilities of 307,000 dol., in New Hampshire; 36, with liabilities of 560,000 dol., in Vermont; 12, with liabilities of 256,000 dol., in Providence; and 10, with debts amounting to 359,000 dol., in the rest of Ripple Island. The number in New York city was 299, with liabilities of 13,218,000 dol. Of the whole number of failures in 1859, 401 were classed as swindling and absconding debtors with obliailures in 1859, 401 were classed as switching and dishonest, but who will pay string amounting to 5,650,000 dol.; and as not dishonest, but who will pay string a nothing 673 with debts to the extent of 7,932,009. The number likely gations amounting to 5,050,000 tool, extent of 7,932,009. to pay in full was stated at 130, whose indebtedness amounted to 6,242,000 dol.

The number of failures in Canada and the British Provinces for the same year

was 350, with debts to the amount of 4,073,000 dollars.

The aggregate of the past three years shews a bankrupt debt in the United States and British N. America of the enormous sum of 468,255,571 dol., of which amount 262,908,508 dol. will prove an absolute loss to the creditors. This is irrespective of the immense losses by railroad and other public corporate compa-In 1857 the failures in the city of New York were about eighteen and a half per cent, and in 1859 rising seven per cent, thus proving that the effects of the crisis were more immediately felt in the cities of the Union, for the per centage of 21 cities shews about the same ratio. The failures of the two years 1858 and 1859, were mostly confined to the country. The number appears large, but the amount involved was convertible condibut the amount involved was comparatively small

BANKRUPTCY.—Some most sweeping changes have been made in the law of Bankruptcy of late years by the Bankruptcy Law Consolidation Act of 1849, and more especially in 1861. Formerly the simple object of distributing the estate of an insolvent amongst his creditors and the releasing the debtor from his liabilities was sought by a threefold division of jurisdiction under Bankruptcy,

Protection and Insolvency.

But the Act of the Lord Chancellor " to amend the Law relating to Bankruptcy and Insolvency in England," 24 & 25 Vict. c. 134, completely changed the practice, and by abolishing the distinction between traders and non-traders, founded at the same time a uniform scheme for administering their property, under courts acting upon the same principles. Every simply unfortunate debtor has now a ready means of escaping from protracted imprisonment, and of being relieved from his liabilities.

Until this act, (observes Mr. Holdsworth in his popular digest), "our law had always made a marked distinction between its dealing with traders and with non-traders, who were unable to pay their debts. The former were styled bankrupts, and the latter insolvents. The administration of their estates was committed to two distinct sets of courts, and was ordained upon very different principles. One of the leading features of the act, is the abolition of this

distinction between insolvents and bankrupts. Both traders and non-traders, who fail to meet their engagements will in future become bankrupts; and both will in general obtain as bankrupts an advantage which was previously confined to the former class, a final release from their liabilities. It is true that the acts which constitute bankruptcy on the part of a trader do not always have the same effect in regard to a non-trader; but when once bankruptcy is established, both classes are now dealt with on the same principles and by the same courts. By the 19th and 20th section of the act, it was provided that the jurisdiction of the insolvent debtors court, and of the county courts in insolvency matters, should cease and determine, except so far as relates to the completion and winding up of business pending in these courts when the act came into operation on October 11, 1861.

The powers of the Court of Bankruptcy are now defined by the 12th clause of "The Bankruptey Consolidation Act, 1849," (12 & 13 Vict. c. 106), and the 1st clause of "The Bankruptey Act, 1861," 24 & 25 Vict. c. 134.

Under the first of these the court, in the exercise of its primary jurisdiction, has superintendence and control in all matters of bankruptcy, and hears, determines, and makes orders in any matter of bankruptcy whatever, so far as the assignees are concerned, relating to the disposition of the state and effects of the bankrupt, or of any estate or effects taken under the bankruptcy and claimed by the assignees for the benefit of the creditors, or relating to any acts done or sought to be done by the assignees in their character of assignees, by virtue or under colour of the bankruptcy; and also in any matter of bankruptcy whatever, as between the assignees and any creditors or other person appearing and submitting to the jurisdiction of the court, and also in any application for an order of discharge, and in any other matter, whether a bankruptcy or not, where the court has jurisdiction over the subject of the petition on application, but subject to an appeal. While the latter section provides that the existing court of bankruptcy shall have and exercise, for the purposes of that act, all the powers and authorities of the superior courts of law and equity, and all the jurisdiction powers and authorities now possessed by the court for the relief of insolvent debtors in England. At present this court consists of the London and Country Commissioners. Within the London district this court has the sole and entire jurisdiction in all bankruptcy business. The remainder of the country is divided into seven districts, those of Manchester, Leeds, Devonport, Birmingham, Bristol, Exeter, and Newcastle-on-Tyne.

In each of these there is a court of bankruptcy, presided over by a Commissioner with the same powers as are possessed by the London Commissioners. The act however contemplates the ultimate abolition of the Country district courts, for it confers upon the Crown power, if upon any vacancy in the office of commissioner of any country district, there shall no longer be a commissioner for such district, to transfer all the jurisdiction, powers and authorities held by the commissioner of such district, to the judges of the county courts, or any of them exercising jurisdiction within such district or any part thereof, (sec. 4). Moreover, with a view to the eventual transfer of the whole country bankruptcy jurisdiction to the county courts, power is given to Her Majesty in Council to create additional county court districts in the country, if it shall be found expedient to invest the judges thereof with jurisdiction in bankruptcy, and to make such new arrangements of the districts of the bankruptcy and county courts respectively as may be found desirable in order to assign a convenient district or districts to such new court or courts. The county courts have indeed an exclusive jurisdiction in bankruptcy conferred upon them immediately, in one class of cases, for the 94th section provides, that when a debtor not resident in the metropolitan district (that is 20 miles distant from the General Post Office), petitions for an adjudication of bankruptcy against himself, and knows or verily believes that the debts justly due and proveable under his bankruptcy, amount in the whole to a sum not exceeding £300, he shall file his petition in

the county court for the district in which he shall have resided for the six months next before the filing of his petition, or for the longest period during those six months, unless he is in custody, and then in the county court of the district in

which he is in custody.

Moreover, at the first meeting of creditors, after the adjudication of bankruptcy, the majority in number and value of the creditors present at such meeting or at any adjournment thereof, may determine that the proceedings in the bankruptcy shall be transferred to, and henceforth prosecuted in, the county court of any district other than the metropolitan district, and the court shall court of any district other than the metropolitan district, and the court shall order the same accordingly, upon being satisfied that such resolution was duly made (sec. 109). The London and district bankruptcy court sits daily for the dispatch of business, holidays excepted. The place and the time for the sittings of county courts are regulated by general orders.

From the decisions of the bankruptcy commissioners, and of the county court judges acting in bankruptcy, an appeal lies to the Court of Appeal in Chancery, which must be presented within thirty days.

The fees payable in the matter of bankruptcy are to be taken exclusively by means of stamps. Their amount is from time to time fixed by ceneral orders

means of stamps. Their amount is from time to time fixed by general orders

issued by or with the sanction of the Lord Chancellor.

By section 51, the commissioners are empowered to sit at chambers for the dispatch of such part of the business of their courts as can, without detriment to the public advantage arising from the discussion of questions in open court, be heard in chambers. The transaction of the unopposed and purely adminis-trative business of the court is still further facilitated by clause 52, which empowers the registrars to make adjudication of bankruptcy, to receive the surrender of any bankrupt, to grant protection, to pass the last examination of any bankrupt in cases where the assignees and creditors do not oppose, to hold and preside at meetings of creditors, to audit and pass accounts of assignees, and to sit in chambers and dispatch there such part of the administrative business of the court and such uncontested matters as shall be defined in general orders, or as the court and such incomessed inactors as shall direct. But the registrar may not commit any one or hear a disputed adjudication, or any question of the allowance or suspension of an order of discharge. The registrar may sojourn any matter coming before him for the consideration of the commissioners. And (sec. 53) any party during the proceedings before the registrar may take the opinion of the commissioner upon any point or matter arising in the course of such proceedings, or upon the result of such proceedings.

The registrars of the court may, during vacation, or the illness or absence, from any reasonable cause, of any commissioner, act as his deputy.

All persons having the legal capacity of entering into binding contracts are liable to be adjudged bankrupts. Aliens and denizens, as well as natural born subjects, may incur this liability. A wife, being a sole trader in the city of London under the customs thereof, the wife of a convict sentenced to transport-

ation, and peers, or members of parliament may become bankrupts.

But by clause 69, it is expressly enacted, that no debtor who is not a trader, shall be adjudged bankrupt, except in respect, that in debot who is not a tradet, shall be adjudged bankrupt, except in respect of some one of the acts of bankruptcy hereinafter described as applicable to a non-trader. The law on this point is still contained in the 69th section of "The Bankruptcy Consolidation Act, 1849," which enacts that "all alum makers, apothecaries, auctioneers, bankers, bleachers, brokers of all kinds, brickmakers, builders, calenderers, carpenters, carriors, cattle or sheep-salesmen, coach proprietors, cowkeepers, dyers, fullers, keepers of inns, taverns, hotels or coffee-houses, lime-burners, livery-stable keepers, market-gardeners, millers, packers, printers, shipowners, shipwrights, victuallers, warehousemen, wharfingers, persons using the trade or profession of a scrivener, receiving other men's moneys or estates into their trust or custody, persons insuring their shops or their freight or other matters against the perils of the sea, and all persons using the trade of merchandise by way of

bargaining, exchange, bartering, commission, consignment, or otherwise, in gross or retail, and all persons who either for themselves, or as agents or factors for others, seek their living by buying and selling, or buying and letting for hire, or by the workmanship of goods or commodities, shall be deemed traders.

The acts of bankruptcy in a trader may be either of the following:

If he shall depart this realm, that is to postpone the payment of his debts; or being out of the realm, shall remain abroad with the intent to defraud or delay his creditors; or shall depart from his dwelling-house with the same object; or otherwise absent himself, or begin to keep house, or suffer himself to be arrested or taken in execution for any debt not due, or yield himself to prison, or suffer himself to be outlawed, or procure himself to be arrested or taken in execution, or his goods, money or chattels to be attached, sequestered or taken in execution; or make, or cause to be made, either within this realm or elsewhere, any fraudulent grant or conveyance of any of his lands, tenements, goods or chattels, or make any fraudulent gift, delivery, or transfer of same. Making any arrangement for paying or securing the debt of a petitioning creditor, and not paying, securing or compounding a debt on which a trader-debtor summons has issued, under the 78—86 clause of the Act 1849; lying in prison for 14 days under arrest; escaping from custody when arrested; filing a declaration that he is unable to meet his engagements.

Another act of bankruptcy peculiar to a trader arises under the 73rd section of "The Bankruptcy Act, 1861," which provides that—

"If any execution shall be levied by seizure and sale of any of the goods or chattels of any trader debtor upon any judgment recovered in any action personal for the recovery of any debt, or money demand, exceeding fifty pounds, every such debtor shall be deemed to have committed an act of bankruptcy from the date of the seizure of such goods and chattels: Provided always, that unless in the meantime a petition for adjudication of bankruptcy against the debtor be presented, the sheriff or other officer making the levy shall proceed with the execution, and shall, at the end of seven days after the sale, pay over the proceeds, or so much as ought to be paid to the execution creditor, who shall be entitled thereto, notwithstanding such act of bankruptcy unless the debtor be adjudged a bankrupt within fourteen days from the date of the sale, in which case the money so received by the creditor shall be paid by him to the assignee under the bankruptcy, but the sheriff or other officer shall not incur any liability by reason of anything done by him as aforesaid: Provided also, that in case of bankruptcy the costs and expenses of such action and execution shall be retained and paid out of the proceeds of the sale, and the balance only after such payment be paid to the assignees."

The acts of bankruptcy committed by a non-trader are defined by the 70th

The acts of bankruptcy committed by a non-trader are defined by the 70th section of the Act of 1861 as follows:-

- "If any person not being a trader shall, with intent to defeat or delay his creditors, (1) depart this realm, or (2) being out of this realm, shall with such intent remain abroad, or shall (3) with such intent make any frandulent conveyance, gift, delivery or transfer of his real or personal estate, or any part thereof respectively, such person shall be deemed to have thereby committed an act of bankruptcy: Provided always that before any adjudication in bankruptcy shall be made against the debtor under this section, the following rules shall be observed:—
- "1. A copy of the petition for adjudication shall be served personally on the debtor either within the jurisdiction, or in such place or country, or within such limits abroad, as the Court
- within the jurisdiction, or in such place or country, or within such limits abroad, as the Court shall, upon application for the purpose, direct.

 "2. Such copy-petition shall have endorsed thereon a memorandum, in a form to be settled by a general order, specifying the time within which the debtor is to appear on such petition; and such time shall, when the service is to be made abroad, be the time which the court shall think reasonable, having regard to the place or country where the service is to be made.

 "3. In no case shall the time for appearance be less than thirty days after service.

 "4. If such personal service has not been effected, the court must be satisfied that every reasonable effort was made to effect the same, and that the attempt to serve such petition came to the knowledge of the debtor, and was defeated by his conduct.

 "5. If at the expiration of the time limited for appearance the court shall on the hearing of such petition be satisfied that an act of bankruptcy has been committed within the meaning of this section, it may adjudge such debtor to be a bankrupt."

The 71st section enumerates two distinct acts of bankruptcy common to both traders and non-traders: first, that of lying in prison; and second, that of escaping out of prison. In the latter case the person is deemed to have been a bankrupt from the time of his arrest; in the former case, only after the expiration of fourteen days, or if a non-trader, two months. We give the section entire:--

"If any debtor, whether a trader or not, having been arrested or committed to prison for debt, or on an attachment for non-payment of money, shall (1) upon such or any other arrest or commitment for debt or non-payment of money, or upon any detention for debt, is a prison, being a trader, for two calendar months, or having been arrested for any cause, shall lie in prison as aforeasid after any detainer for debt lodged against him and not discharged, every such debtor shall thereby be deemed to have committed an act of bankruptcy; or (3) if any such debtor shall thereby be deemed to have committed for debt, shall escape out of prison or custody, every such debtor shall be deemed to have committed an act of bankruptcy from the time of such arrest, commitment or detention. But no debtor shall be adjudged bankrupt on the ground of having lain in prison as aforeasid, unless having been summoned he shall not offer such ascurity for the debt or debts in respect of which he is imprisoned or detained, as the commissioner or registrar whose duty it would otherwise be to adjudicate shall deem reasonably sufficient."

The these receivings to make a rooms havely runt as a trader, when done by a

The three requisites to make a mere bankrupt as a trader when done by a creditor are—1. Proof of trading; 2. Proof of an act of bankruptcy committed; 3. Proof of a sufficient petitioning creditor's debt.

By section 89, "the amount of the debt of any creditor petitioning for adjudication of bankruptcy against a debtor, whether a trader or not, shall be as follows—that is to say:—

"The debt of a single creditor, or of two or more persons being partners, shall amount to £50 or upwards.—The debt of two creditors shall amount to £70 or upwards.—The debt of three or more creditors shall amount to £100 or upwards."

The petitioning creditor's debt must not be merely an equitable debt, though such a debt may be proved under a bankruptcy. It must not be founded on an illegal consideration, nor be one based by the Statute of Limitations.

With a view to enquiry, the court has power to summon before it any person whom it shall believe capable of giving information—including the bankrupt, his wife, family, or servants—and to require him or her to produce any books or documents, and to examine him or her upon oath touching the trading and act of bankruptev.

of bankruptcy.

The court having been satisfied on the points we have mentioned, will adjudge the debtor bankrupt, and will forthwith appoint an official assignee. Sec. 100, 101.

But it order to give the debtor an opportunity of disputing the adjudication, if he pleases, it is provided (sec. 104), that before notice of any adjudication of bankruptcy is given in the London Gazette, and at or before the time of putting in execution any warrant of seizure granted upon such adjudication, a duplicate adjudication shall be served on the person adjudged bankrupt, either personally or by leaving the same at the usual or last known place of business of such person, who is to be allowed seven days from service, or such extended time not exceeding fourteen days in the whole, as the court thinks fit, to show cause to the court against the validity of such adjudication. If the debtor, within such time, shows to the satisfaction of the court that the petitioning creditor's debt, trading, and act of bankruptcy upon which the adjudication is grounded, or either of such matters [4.e. of course as to the trading, where it is necessary to prove trading on the part of a debtor], are insufficient to support the adjudication; and no other creditors, debt, trading, and act of bankruptcy sufficient to support such adjudication (or such of the last-mentioned matters as are requisite to support such adjudication in lieu of the petitioning creditor's debt, trading, and act of bankruptcy, which have been deemed insufficient), are proved to the satisfaction of the court, the court thereupon is to order the adjudication to be annulled.

If, however, cause for annulling the adjudication be not so shown to the satisfaction of the court, the court will forthwith cause notice of the adjudication to be inserted in the *London Gazette*, and will thereby appoint two public sittings of the court for the bankrupt to surrender and conform, the last of which shall be on a day not less than thirty days, and not exceeding sixty days from such advertisement, which is to be the day limited for surrender. But the court may,

from time to time, enlarge the time for the bankrupt surrendering himself, so as every such order be made six days at least before the day on which such bank-

rupt was to surrender himself.

And the same clause also enacts that if any person adjudged bankrupt shall, before the expiration of the time allowed for showing cause, surrender himself and give his written consent to the adjudication being advertised, the court may forthwith cause the notice of adjudication to be advertised, and may appoint the sittings for the bankrupt to surrender and conform.

Every debtor petitioning against himself must file a statement (verified by oath) of his debts and liabilities, of the names and residences of his creditors, and of the causes of his failure, within such time, after filing his petition, and in such

form as the general orders may direct. Sec. 93.

When a debtor petitions for adjudication against himself, and knows or believes that the debts, proveable under his bankruptcy, will not exceed £300, he must state this fact on oath. If he be resident in the metropolitan district, his petition, in any case, must be filed in the London Court of Bankruptcy. But if he be resident out of the metropolitan district, and his debts do not exceed £300, he is then to file his petition in the county court for the district in which he has resided for the six months next before the filing of his petition, or for the longest period during those six months, unless he is in custody, and then in the county court for the district in which he is in custody; but such court, if it make adjudication, is to transfer the proceedings to the county court in which the debtor, if not in custody, would have been required to petition. Sec. 94.

The Act of 1861 not only places it in the power of any prisoner to obtain his release by petitioning for an adjudication of bankruptcy, but also contains provisions compelling every prisoner to become bankrupt, and thus to accept his

release on the condition of surrendering his property to his creditors. Prisoners may petition in forma pauperis, on affidavit that they have not the means of paying the expenses of an adjudication.

The 100th section directs that the gaoler of every prison in England and Wales, within which any person is confined for debt, shall on the first day of every month make a return of the name of every such person, the date of his imprisonment, the nature and amount of the debt for which he is imprisoned, and whether he is willing, or refuses to petition the Court of Bankruptcy, or is unable to do so by reason of poverty. This return is also to include the name and addresses of every creditor at whose suit such prisoner is detained, and is to be made by gaolers of prisons, situated within the London district, to the London district distri don court, and by the gaolers of prisons within the country districts to the district Court of Bankruptcy, or the country court having jurisdiction in bankruptcy, within the jurisdiction of which the gaol is situate, as the case may be.

The bankruptcy commissioner, or county-court judge, on receiving this return, is to direct his registrar to attend at the gaol on a day, at least seven, and not more than twenty-one, days from the date of the return. Notice of the day on which the registrar will attend is to be forthwith given to the gaoler, and also to the execution and detaining creditors of every person included in such return. On the day named the registrar will attend at the prison and examine every prisoner included in such return who shall have been in prison, being a trader for fourteen days, or not being a trader for two calendar months, touching his estate and effects, dealings and transactions. He is also to ascertain the last place of abode and business of each prisoner within the last six months next prior to his imprisonment. Having done this, the registrar has power to make an order of adjudication in bankruptcy against every such prisoner, and to grant him protection, and to make an order for his release from prison, and to direct in what court the adjudication shall be prosecuted, having regard to the amount of debts and the place of hade or residence of the prisoner within the six months next preceding the imprisonment. Sec. 101.

If any prisoner refuse to appear to be sworn, or to answer all lawful questions

of the registrar, or of any creditor present, respecting his debts, liabilities, dealings, and transactions, or to make a full discovery of his estate and effects, and of all his books and accounts, or to produce the same, or to sign his examination when taken, the registrar is to report the same to the court, and the court may, by warrant, under the hand and seal of the judge or commissioner, commit the prisoner to the common gaol of the county, there to be kept with or without hard labour for any time not exceeding one month, and the court may at the same time adjudge the prisoner a bankrupt.

By section 105, forthwith after insertion of adjudication in the Gazette, or if he surrenders himself before the expiration of the time for showing cause, forthwith on such surrender, the bankrupt, if required by the official assignee, must deliver upon oath all documents in his own power relating to his estate, and discover those in the power of any other person; and if he be not in prison, he must, on notice after his surrender, attend his assignees, and assist in making out the accounts. He may inspect his books, &c., for the purpose of fluishing his examination in their presence, or that of some person appointed by them, and bring two persons to assist him; and if after he has obtained his "order of discharge" he attend his assignees, which he is compellable to do, he is to be allowed five shillings a day.

When the bankrupt has surrendered, the court may from time to time make such allowance to him out of his estate as shall be necessary for the support of himself and his family, until he has passed his last examination. But no such allowance is to be made by the court for any period after the adjournment of the last examination sine die.

Previously to the passing of this Act three classes of certificates were granted to bankrupts, in accordance with what were supposed to be their merits, but the duties of the court are now confined to granting, suspending, or refusing a certificate of discharge.

The 159th clause, which regulates this matter, lays down the following rules:-

I. If on the hearing of any application for an order of discharge the assignees on ay creditor shall allege, and if with or without such allegation, the court shall be of opinion that there is ground for charging the bankrupt with acts or conduct amounting to a misdemeanor under this act, the court shall, if the bankrupt with acts or conduct amounting to a misdemeanor under this act, the court shall, if the bankrupt consent thereto, direct a clear statement in writing of the charge to be delivered to the bankrupt, and shall appoints a day for trying the bankrupt on such charge, and, if the bankrupt require it, shall summon a jury for such purpose, and may direct the creditors' assignee, or the official assignee, or any of the creditors of the bankrupt, to act as prosecutor on such trial: Provided always, that in every case of accusation against a bankrupt of acts amounting to a misdemeanor, it shall be competent to the court to direct that the bankrupt be indicted and prosecuted in one of the ordinary courts of criminal justice; and in all other cases the order of discharge shall take effect immediately from its date, subject to the appeal herein provided.

appeal herein provided.

II. If on such trial by a jury or by the commissioner alone the bankrupt shall be convicted of any offence by this act made a misdemeanor, the commissioner shall, in addition to the punishment awarded for the offence, have power to direct that the order of discharge be either

or any offence by this are instanced for the offence, have power to direct that the order of discharge be either wholly refused or suspended during such time and upon such conditions as he shall think fit.

III. If the bankrupt shall not be accused of acts amounting to misdemeanor, or if he shall have been accused and acquitted, but in either case there shall be made, or shall appear to the court to axist, objection to the granting of an immediate discharge, the court shall proceed to consider the conduct of the bankrupt before and after adjudication, and the manner and circumstances in and under which his debts have been contracted; and if the court shall be of

cpinion—

 That the bankrupt has carried on trade by means of dictitious capital, or—
 That he could not have had at the time when any of his debts were contracted, any reasonable or probable ground of expectation of being able to pay the same, or—
 That if a trader, he has, with intent to conceal the true state of his affairs, wilfully omitted to keep proper books of account, or—
 Whether trader or not, that his insolvency is attributable to rash and hazardous speculation, or unjustifiable extravagance in living, or—
 That he has put any of his creditors to unnecessary expense by frivolous or vexatious defence to any action or suit to recover any debt or money due from him, the Court may either refuse an order of discharge, or may suspend the same from taking effect for such time as the court may think fit, or may grant an order of discharge, subject to any condition or conditions touching any salary, pay, emoluments, profits, wages, earnings or income which may afterwards become due to the bankrupt, and touching after-acquired pro

perty of the bankrupt, or may sentence the bankrupt to be imprisoned for any period of time, not exceeding one year from the date of such sentence.

Then the clause concludes with this important provision:- "Provided always, that no person shall be liable by virtue of this act to any criminal proceedings or penalty in respect of any matter which may have occurred before the passing of this act, to which he would not have been liable if this act had not passed."

Persons, whose certificates have been refused before the passing of this act, may, after the expiration of three years from such refusal, apply to the court for an order of discharge, and the court may grant it either absolutely or subject to any condition or conditions, in the same manner as if the bankruptcy of such applicant had taken place after the commencement of this act. Sec. 160.

Among the criminal offences under the act are the committing of forgery, the insertion of false advertisements under the bankruptcy acts in any newspaper, the forging the signature of any officer or the seal of the court. By the 221st section it is enacted, that any bankrupt who shall do any of the acts or things following with intent to defraud or defeat the rights of his creditors, shall be guilty of a misdemeanor, and shall be liable at the discretion of the court before which he shall be convicted to punishment by imprisonment for not more than three years, or to any greater punishment attached to the offence by any existing statute.

If he shall not upon the day limited for his surrender, and before three of the clock of such day, or at the hour and upon the day allowed him for finishing his examination, after notice in writing served upon him personally, or left at his usual or last known place of abode or business, and after notice in the London Gazette, surrender himself to the court (having no

or business, and after notice in the London Casette, surrender himself to the court (having no lawful impediment allowed by the court), and sign or subscribe such surrender, and submit to be examined before such court from time to time:

2. If he shall not upon his examination fully and truly discover, to the best of his knowledge and belief, all his property, and how and to whom, and for what consideration, and when he disposed of any part thereof, except such part as has been really and bond fide before sold or disposed of in the way of his trade or business, if any, or laid out in the ordinary expense of his family, or shall not deliver up to the court, or dispose as the court directs of all such part thereof as is in his possession, custody or power, except the necessary wearing apparel of himself, his wife and children; and deliver up to the court all books, papers and writings in his possession, custody or power, relating to his property or affairs:

3. If he shall, after adjudication, or within sixty days prior to adjudication, with intent to defraud his creditors, remove, conceal or embezzle any part of his property to the value of ten pounds or upwards:

pounds or upwards:

4. If any person having to his knowledge or belief proved a false debt under his bank-tcy, he shall fall to disclose the same to his assignees within one month after coming to the ruptcy, he shall full to disclose the same to me assumed a surface when the same to me assumed the knowledge or belief thereof:

5. If he shall, with intent to defraud, wilfully and fraudulently omit from his schedule any

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7. If he shall, after the filing of the petition for adjudication, or within three months next before adjudication, with intent to conceal the state of his affairs, or to defeat the objects of the law of bankruptcy, part with, conceal, destroy, alter, mutilate or faisify, or cause to be concealed, destroyed, alterd, mutilated and falsified, any book, paper, writing, or security or document relating to his property, trade, dealings or affairs, or make or be privy to the making of any false or fraudulent entry or statement in or omission from any book, paper, document or writing relating thereto:

8. If, within the like time (c.s. three months before adjudication), he shall, knowing at the time that he is unable to meet his engagements, fraudulently and with intent to diminish the sum to be divided amongst the general body of his creditors, have made away with, mortaged, encumbered or charged any part of his property, of what kind soever, or if after adjudication he shall conceal from the court or his assignee any debt due to or from him.

LEREADOVE OFFERDES, It will be seen, may be committed both by traders and non-traders; those which follow are peculiar to traders:—)

9. If, being a trader, he shall, under his bankruptcy, or at any meeting of his creditors within three months next preceding the filing of the petition for adjudication, have attempted to account for any of his property by fictitions losses or expenses:

10. If, being a trader, he shall, within three months next before the filing of the petition for adjudication, under the false colour and pretence of carrying on business and dealing in the ordinary course of trade, have obtained on credit from any person any goods or chattels with intent to defraud:

11. If, being a trader, he shall, with intent to defraud his creditors, within three months next before the filing of the petition for adjudication, pawn, pledge, or dispose of, otherwise than by bond fide transactions in the ordinary way of his trade, any of his goods or chattels which have been obtained on credit and remain unpaid for.

If it appear to any court under this act that the bankrupt have been guilty of any of these offences, such court may exercise such power for the summoning, apprehending, committing, remanding, bailing and otherwise proceeding in respect of such bankrupt, as are exercised by justices of the peace in respect of persons charged before them with any follony or misdemeanor. Sec. 222.

The court may direct the creditors' assignee, or, if there be none, the official assignee, or any of the creditors of the bankrupt, to act as the prosecutor, and give him a certificate of the court having so directed, and upon the production of this certificate, the costs of the prosecution are to be allowed by the court before which any person is tried, in all respects as the expenses of prosecutions for

felonies are now paid and borne. Sec. 223,

The court may direct the assignees to lay the papers before the Attorney-General (or the Solicitor-General during a vacancy in the office of Attorney General) for his direction thereon, either while the bankruptcy is pending before the court, or when it has been brought to a conclusion. Sec. 224.

As to the mode of trial we have already seen that by the 159th section of the same act, if, on the hearing of the application for the order of discharge of any bankrupt, the assignee or any creditor shall, or without such allegation, the court itself, shall be of opinion that there is ground for charging the bankrupt with one of the above misdemeanors, the court may either:-

First. With the consent of the bankrupt, direct a clear statement, in writing, of the charge to be delivered to the bankrupt, and appoint a day for trying him,

summoning a jury for that purpose if the bankrupt require it; or

Secondly. Without the consent of the bankrupt, the court may direct him to be indicted before one of the ordinary criminal courts.

By the 226th clause the court has power to commit to prison persons wilfully

disobeying its rules and orders.

We have given as full an abstract of the most important sections of this elaborate act as appeared essential. Many of the clauses and points in a summary of this kind it is quite impossible even to allude to. But there have been several admirable cheap digests made of it, among which we may enumerate, The Bankruptcy Manual, by Mr. C. E. Lewis, 2s 6d, and the Law of Bankruptcy, by Mr. W. A. Holdsworth, 1s. The most complete work on the subject is Leonard Shelford's Law of Bankruptcy and Insolvency. London, Maxwell, 1862. 12mo. 1238 pp. Price £2.

BANKS.-To Sections I. and II. of the article in the body of this work, the Historical Notice, and the Objects and Principles of Banking, nothing need be added, but the other divisions of the subject may be traced down to the present period in the same order of description, namely-

III. THE BANK OF ENGLAND. - The tables which have been brought down in continuation of the text in the body of the work speak for themselves as to the operations of the Bank of England, but a few observations may be made thereon:-

Discount of Mercantile Bills .- The Bank objects to publish any details as to its discount operations unless such returns are specially called for by the Government. In 1855, the total amount of commercial paper discounted by the Bank was £22,136,590; in 1856, £30,924,699; in 1857, £49,146,679. The last named year was an exceptional one, but the average monthly amount of bills under discount by the Bank would seem to be about £3,000,000.

The private banks and discount brokers, however, take the largest share, for besides Messrs. Gurney's and other large discount brokers, there are now three discount companies in London—the London, the National, and Mercantile Discount Companies. The discount brokers complain of the want of accommodation afforded them by the Bank of England, which, while it deals with private individuals, refuses to discount for them, and a curious effort at coercion or inconvenience was made by one large discount house in April, 1860, which with-drew bank notes from the Bank of England to the amount of more than one million and a half sterling.

Deposits by Private Parties.—These may be considered to average now about 14 millions. On February 7, 1846, the private deposits were £18,400,000. The highest amount for some years was then £14,620,000 in July, 1852. In 1859 the private deposits reached £16,836,238 in June. The Joint-stock Banks and private bankers, however, monopolise a large share of the deposits of the public; the former from paying interest thereon, and the latter from the facilities afforded to depositors.

Branch Banks.—Besides a west-end branch, the Bank of England has now ten provincial branch Banks. The following alterations have been made since the statement at page 53. The branches at Gloucester, Norwich, and Swansea have been closed, and a branch bank opened at Leicester.

The Profits of the Bank have been pretty steady, and of late years show an increase. In 1852 the dividend on Bank stock rose to 7½ per cent; in 1853, to 8 per cent; in 1854, to 9 per cent, and in subsequent years it has been 9½ and 10 per cent. The rest has always been kept above £3,000,000, and in several years of late has averaged three millions and a half.

Circulation .- The Circulation of the Bank it will be seen now averages about £21,000,000 in notes held by the public besides about eight or nine millions held by the Bank. In December, 1859, the note issue stood at £30,743,815, of which £21,150,405 were in the hands of the public, and £9,593,410 held by the

Accounts.—The appended tables bring down the accounts of the Bank to the latest period.

	Liabii	ITIES.	Assets.		
	Circulation.	Deposits.	Securities.	Bullion.	
1841—January 5	16,112,000	7,049,000	22,362,000	8,557,000	
March 80	16,537,009	7,212,000	22,328,000	4,839,000	
July 20	16,821,009	7,746,000	22,275,000	5,170,000	
October 12	17,592,009	7,529,000	23,428,000	4,713,000	
1842 January 4	16,632,000	7,948,000	22,680,000	4,779,000	
March 29	16,952,000	8,657,000	22,586,000	6,125,000	
July 16	18,279,000	8,565,000	21,713,000	7,818,000	
December 30	19,230,000	9,068,000	20,560,000	10,330,000	
1848 - March 25	20,098,000	12,033,000	23,830,000	11,054,000	
June 17	19,521,000	10,495,000	21,604,000	11,427,000	
September 9	19,496,000	11,727,000	22,394,000	12,018,000	
December 30	19,098,000	11,751,000	21,067,000	12,855,000	
1844 March 93	21,122,000	13,972,000	22,479,000	15,781,000	
June 15	21,237,000	13,483,000	21,916,000	15,900,000	
September 7	21,200,000	12,275,000	21,800,000	15,209,000	
December 28	20,100,000	15,600,000	21,000,000	14,800,000	

By the last Bank Charter Act (7 & 8 Vict. c. 32) which came into operation on the 1st Sept. 1844, it was enacted that the issue of promissory notes of the bank should be kept distinct from the general banking business of the Company, and be carried on separately as "the Issue Department of the Bank of England." From the same date the Company are to appropriate securities to the value of fourteen million pounds to the Issue Department, of which the public debt of the Government to the Company is to be deemed a part, and so much gold coin and gold and silver bullion as shall not be required by the banking department; thereupon an equal amount of bank notes (including those in circulation) shall be transferred from the issue department to the banking department, and the whole amount shall be deemed to be issues on the credit of such securities, coin, and bullion.

§ 3 declares, that the amount of silver bullion retained by the issue department shall not at any one time exceed a fourth part of the gold coin and bullion

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held at the same time. All persons may demand from the issue department notes for gold bullion at the rate of £3. 17s 9d per ox. of standard gold.

The accounts of the Bank were previously published, but less frequently and in another and shorter form. The accounts in the form directed by the new Act are, partly from their increased detail, and partly from their appearing in two separate shapes, somewhat less generally intelligible than in the old form. From the number of columns (about 16) that would be requisite to carry down the returns for sixteen years, and the immense mass of figures, it seems scarcely desirable to continue the quarterly returns down to the present time in their new form. I may therefore give a brief summary of the averages at the close of each year: close of each year:-

	Liabilities.			Assetts.			
	Circulation.	Deposits.	Securities.	Bullion.	Rest.		
1845-6	2:,000,000	17,000,000	26,500,000	15,000,000	8,500,000		
1847	19,000,000	14,000,000	20,800,000	10,000,000	8,800,600		
1848-51	20,000,000	17,000,000	25,200,000	15.000,000	8,200,000		
1852-53	23,000,000	18,500,000	25,000,000	20,000,000	8,500,000		
1854-56	21,000,000	16,000,000	26,500,000	14,000,000	8,500,000		
1856	21,000,000	15,000,000	28,400,000	11,000 000	8,300,000		
1857	21,100,000	20,500,000	38,600,000	7,000,000	8,400,000		
1858	21,435,000	20,490,000	26,098,000	18,985,000	8,115,000		
1859	20,830,000	22,870,000	80,830,000	16,130,000	8,160,000		

IV. LONDON BANKERS.—There are now 56 private banking firms in London, with 200 partners as follows:

London Private Banking Firms in January, 1860.

TORROTT TILLING THEFT	2 x	11 Gardan, 1000.	mber e
Name of Firm.			artner
Barcley, Bevan, Tritton, and Co.		- 54 Lombard-street	er energ
	-	- Lombard-street -	- 5
Barnett, Hoares, and Co	-		
Bennett, W.	-	- Metropolitan Cattle-marke	* - 1
Biddulph, Cocks, Biddulph, and Co.	-	- 48, Charing-cross - - 68, West Smithfield	
Biggerstaffs -	-		- 3
Bosenquet, Franks, Whatman, and Harman	-	- 78, Lombard-street	- 4
Brown, Janson, and Co	-	- 32, Abchurch-lane -	- 6
Brown, John, and Co	-	- 25 Abchurch-lane	- 1
Call, Marten, and Co	-	- 25, Old Bond-street	- 2
Challis and Son	-	- 87, West Smithfield	- 8
Child and Co	-	- 1, Fleet-street -	- 6
Coutts and Co	-	- 58 and 59, Strand	- 5
Cunliffe, Son, and Co	-	- 24, Lombard-street	- 4
Cunliffe, Roger, Son, and Co	•	- 24, Bucklersbury -	- 8
Curries and Co	•	- 29, Cornhill -	- 4
Davies, Robert, and Co	-	- 187, Shoreditch -	- 2
Dimadale, Drewett, Fowler, and Barnard	-	- 50, Cornhill -	- 4
Drummond, Mesers.	-	- 49, Charing-cross	- 7
Feltham, John, and Co	-	- 42, Lombard-street	- 3
Fuller, Banbury, and Co	-	- 77, Lombard-street	- 4
Glyn and Co	-	 67, Lombard-street 	- 7
Goslings and Sharpe	-	- 19, Floet-street -	- 5
Hallett, Maude, and Hallet -	-	- 14, Gt. George-st. Westmit	
Hanburys and Lloyds	•	- 60, Lombard-street	- 5
Hankeys and Co.	-	- 7, Fenchurch-street	- 5
Herries, Farquhar, and Co	-	- 16, St. James's-st. Westmin	
Heywood, Kennarda, and Co.	-	- 4, Lombard-street	- 4
Hill and Sons	-	- 17, West Smithfield	- 2
Hoares, Messrs	-	- 37, Fleet-street -	- 2
Holyland, E. and Son	-	- 113, Leadenhall-street	- 2
Hopkinson and Co	-	- 3, Regent-street, St. James	'8 2
Johnston, Hugh and John, and Co.	-	- 28, Cannon-street	- 3
Jones, Loyd, and Co	-	- 48, Lothbury -	- 4
Lacy and Son	-	- 60. Smithfield -	- 2
Lubbock, Sir J. W. and Co	-	- 11. Mansionhouse-street	- 8
Marryatt and Co	-	- 8, King William-street	- 2
Martins and Co	•	- 68, Lombard-street	- 8
Masterman, Peters, Mildred, Masterman, an	d Co.	- 35, Nicholas-lane, Lombs	t. 4
Olding, Sharpe, and Co	•	- 29, Clement's-lane	- 3
Praeds and Co	-	- 189, Fleet-street -	- 3
Prescott, Grote, Cave, and Co	-	- 62. Threadneedle-street	~ 5
		,	-

Name of Firm.			Place of Business Number of Partners.
Puget, Bainbridges, and Co.	•	•	- 12 St. Paul's Churchyard - 4
Ransom, Bouverie, and Co.	-	-	- 1, Pall-mall East 5
Robarts, Curtis, and Co	-	-	= 15, Lombard-street - 5
Samuel and Montagu -	•	-	- 21, Cornhill 2
Seale, Low, and Co	-	_	- 7. Leicester-square - 2
Scott, Sir Samuel, Bart, and Co.		-	- 1, Cavendish-square - 2
Shank, John -	•	-	- Metropolitan Cattle-market 1
Smith, Payne, and Smith	_	_	- l. Lombard-street - 6
Spielman and Co	_	_	= 79, Lombard-street - 1
Spooner, Attwoods, and Co.	_	_	- 27. Gracechurch-street - 8
Stevenson, Salt, and Sons	_	-	- 20. Lombard-street - 2
	•	•	
Stride, J. and W.S.	•	•	- 41, West Smithfield - 2
Twining, R. and Co	_ •	• .	- 215 and 216, Strand - 2
Williams, Deacon, Labouchere,	Thornton,	and Co.	- Birchin-lane 6
Willis, Percival, and Co	- '	-	- 76, Lombard-street - 4
			
56 Firms.			Total Number of Partners - 200

Several private banks have discontinued business. Thus the failure of Messrs. Strahan, Psul, and Bates, on the 11th June, 1855, was attended with striking disclosures as regarded the conduct of business. For their malpractices the three partners were criminally prosecuted and sentenced, on the 27th Oct. to 14 years' transportation, although some modification of the severity of the sentence was subsequently made.

Messrs. White, Ludlow, and Co., of the Haymarket, failed a year or two ago, Messrs. Tisdale and Ward have ceased business as bankers. Messrs Sapte. Muspratt, Banbury, and Co., are smalgamated with Fuller and Co. Messrs. Dixon, Brooks, and Dixon, of Chancery Lane, are smalgamated with the Union Bank. Messrs. Bouverie and Co. joined the firm of Ransom and Co.

METROPOLITAN JOINT-STOCK BANKS —Compared with former years, the following are the statistics of the banking business of London :—

	Jan. 1845.		Jan. 1855.		Jan. 1860.	
	Firms.	Partners.	Firms.	Partners.	Firms.	Partners.
Private Banks	60	217	59	205	56	199
Joint Stock ditte		2102	6	4323	8	not known.

The five Joint-stock Banks which were in existence in 1845 were the London and Westminster, the London Joint-Stock, the Union Bank of London, the Commercial Bank, and the London and County Bank. The Royal British Bank was established in 1849, but failed a few years ago. Three new banks were established in 1855—the City Bank, the Bank of London, and the Unity Bank. The Western Bank of London was established in 1856, and ceased to exist in 1859, the bulk of its business being transferred to the London and County.

The financial comparison of the three periods stands as follows:-

	Paid-up Capital.	Surplus Fund.	Deposits.
Five Banks in January, 1845	£2,063,925	188,001	7,984,305
Six Banks in January, 1855	2,772,795	486,217	26.338,586
Right Banks in January, 1860	8,899,045	788,804	89,855,078

The subjoined Tables have been made up, exhibiting their respective capitals and extent of transactions, as well as the periods at which they were severally opened. The first table shows the capitals and liabilities in the close of 1859. The second table specifies the amount of each guarantee fund, the ratio of capital and guarantee fund liabilities, and the rate of distribution declared; that of the London and Westminster, which in 1858 was 18 per cent., being 20 for 1859; while that of the London Joint-Stock has been lowered from the exceptional amount of 32½ to 23½. The Commercial and City Banks, which paid 5 per cent. in 1858, went up respectively to 7 and 6 per cent. in 1859. The third table supplies a statement of the progress of each establishment during the past ten years:—

Banks.	Year founded.	Paid-up Capital.	Current and Deposit Accounts.
London and Westminster London Joint-stock Union Bank of London - London and County Commercial Bank of London City Bank Bank of London Unity -	1834 1836 1839 1839 1839 1839 1855 1855	\$ 1,000,000 600,000 720,000 500,000 300,000 300,000 179,045	£ 11,115,697 9,556,797 9,318,391 4,975,029 926,314 2,222,976 1,599,140 140,734

Banks.	Guarantee Fund.	Rate of Dividend and Bonus per Annum.	Proportion of paid- up Capital and Guarantee Fund to Current and Deposit Accounts.
London and Westminster London Joint-stock Union Bank of London London and County Commercial Bank of London City Bank Bank of London Unity Unity	£ 190,591 228,340 94,633 105,000 75,000 33,000 12,240 NIL 788,804	Per Cent. 20 23½ 16 12 7 6 5 Nil	Per Cent. 10-07 8-66 8-74 12-16 40-48 14-94 19-52 77-18

Table exhibiting the quinquennial progress of the London Joint-Stock Banks within the past 10 years, showing the respective amounts of current and deposit accounts, guarantee funds, dividend and bonus per annum, also the ratio of decennial increase of current and deposit accounts per cent.:—

Year.	Banks.	Current and Deposit Accounts.	Guaran- tee Fund.	Dividend and Bonus per Annum.	Ratio of Decen- nial Increase of Current and De- posit Accounts.
		£	£	Per Cent.	Per Cent.
1949 1854 1859	London and West-	3,680,523 7,177,244 11,115,607	107,844 134,626 200,000	6 14 18	202-00
1849 1854	London Joint-stock -	2,792,507 6,161,154 9,556,797	182,723 155,852 229,370	9 <u>8</u> 25 18	242-23
1859 1849 1854	Union Bank of London	2,835,617 7,031,477 9,318,391	50,000 50,000 94,638	6 15 15	228-62
1859 1849 1854	London and County -	1,675,494 3,779,945 4,975,029	28,383 61,671 105,000	6 12 11	196 98
1859 1849 1854 1859	Commercial Bank of London }	541,804 1,265,903 926,314	17,418 64,012 75,000	6 10 7	} 70 -9 7

The aggregate increase of deposits in the first five years was 120.50 per cent.; in the second period, 41.22 per cent. The ratio of increase in the aggregate for the past 10 years has been 211.40 per cent.

The following statement of the dividends and value of the shares of some of the principal London and Colonial Joint Stock Banks made up to January 1859, shows the profitable return of banking business in London, when prudently conducted ducted.

	Paid up on Shares.	Dividend declared.	Present value pr. Sbr.	100	Present value of 1008hrs.	Net Profit.	Profit on Outlay.
	£		8	£	*	£	
London and Westmin- }	20	17 per ct	50	2,000	5,000	8,000	150 per ct
London-JointStock Bank	10	273 per ct		1,000	8,400	2,400	240 per ct
London & County Bank	20	12 per ct		2,000	3,100	1,100	55 per et
Union Bank of London	10	15 per ct	94	1,000	2,400	1,400	140 per ct
Oriental Bank	25	10 per ct		2,500	4,000	1,500	60 per et
Agra and United Ser- } viceBank (Limited)	50	10 per ct	6 8	5,000	6,800	1,800	36 per ct
City Bank (Estab.)	50	5 per ct	64	5,000	6,400	1,400	28 per ct
		and carries forward 5 per cent.				,	
Union Bank of Australia	25	20 per ct	52	2,500	5,900	2,700	108 per ct
Colonial Bank	25	7 per et		2,500	8,300	800	82 per ct
Bankof New South Wales	20	20 per ot		2,000	4,800	2,800	140 per ct
Chartered Mercantile)						•	
Bank of India	25	16 per ct	63	2,500	6,200	8,700	148 per ct
Bank of Australasia	40	20 per et	92	4,000	9,900	5,900	130 per ct

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Yielding an average on the above of 151 per cent. dividend, and of 1051 per

cent. on the paid-up capital.

The number of Joint Stock Banks in the metropolis including branches, has been as follows, in the last few years:

1854			28	1857 1858			36
1855			26	1858		•	83
1856	_	_	86	1859	_	_	83

This is exclusive of the numerous branches and sub-branches of the National Provincial Bank, and the London and County Bank.

V. ENGLISH PROVINCIAL BANKS.

In December 1859, the number of Joint Stock Banks in England and Wales, (including those of London) was 94; of Scotland 15; and of Ireland 8; besides which there were about 18 Foreign and British Colonial Banks, having offices in London.

The number of separate Joint Stock Banks and their branches, were as follows: in

1		1854	1855	1856	1857	1858
England and Wa Scotland : Ireland .	les .	630 454 215	624 481 214	656 581 206	669 642 209	674 746 209
regard	•	1299	1319	1448	1520	1629

The following return distinguishes the counties, and shows the progress of bank-

In the following return distinguishes the country, and shows the progress of banksing establishments in the last five years.

Number of Joint Stock Banks, including Branch Establishments, in each County in England and Wales, Scotland, and Ireland (including the Banks of England and Ireland and their Branches), in the Years 1854 and 1858.

COUNTE	19.	1854	1858	Countin	a.	1851	1858
ENGLAND AND Bedford . Berks . Bucks . Cambridge . Cornwall . Cumberland . Derby , Devon . Dorset . Durham .	WALES.	4 9 9 4 8 5 14 7 28	4 9 10 4 10 5 14 8 27 14	ENGLAND AND Resex. Gloucester Hants Hereford Herts Huntingdon Kent Lancaster Lelcester Lincoln	WALES	10 22 18 6 6 4 23 85 15	111 200 200 7 9 4 26 28 16 26

COUNTIES.	1854	1856	Courties.	1854	1856
ENGLAND AND WALE		_	ENGLAND AND WALES.		
Middlesex (exclusive of Me	-} 1		Worcester .	12	1:
tropolis) .	11 -	_	York, East Riding .	7	7
Metropolis .	´. 23	32	North Riding .	39	3.5
Monmouth	.1 4	4	" West Riding .	44	4
Norfolk .	و [111	Berwick-upon-Tweed	l i	41
Northempton	7 9	11	Anglescy] 4	7
Northumberland .	ة اـ	7	Brecknock] ē	•
Nottingham .	.] 7	1 7	Cardigan .		- 3
Oxford .		10	Carmarthen	1 _	ī
Rutland .	. 2	3	Carnaryon	3 40	
Salop .	. 14	14	Denbigh .	. 6	
Someraet	36	36	Flint	اله ا	i
Stafford .] 16	20	Glamorgan]	11
Suffolk	.] - 8	7	Marioneth] 의	1
Surrey		5	Montgomery] [7
Sussex	. 15	18	Radnorshire] _]	ì
Warwick .	. 21	21			
Westmoreland .] 3	- 3	Total for England and)		
Wilts .	.] 24	24	Walce .	630	674
SCOTLAND.	1 48	1 60	IRELAND.		
Aberdeen .	.! 11	19	Antrim .	17	18
Argyll	.] 87	72	Armagh	is	î
Ayr] "	93	Cavan	7	7
Banff	.) 6		Carlow	اوا	j
Berwick	نه ا:	7	Clare	اء ا	- 7
Bute			Cork	16	16
Caithness .	: :	ıĭ	Donegal	الآء ا	
Clackmannan .		- 9	Down	13	5 13
Cromarty .	.]. 6	11	Dublin	7	17
Dumbarton .	. 25	35	Fermanagh	اذا	i
Dumfries	. 26	28	Galway	7	7 8 7
Edinburgh .] 4	7	Kerry	4	ż
Elein .	. 29	49	Kildare .	2	;
Elgin Fife	يَوُ ا	43	Kilkenny	1 4	•
Porfar .	. 8	13	King's County	2	•
Haddington .	13	20	Limerick	1	7
Inverness	. 18	10	Londonderry	21	20
Kincardine .] 3	15	Longford	2	3
Kinroes		16	Louth	6	î
Kirkeudbright	41	61	Mayo .	3	•
Lanark	. 3	9	Meath	8	•
Linlithgow		13	Monaghan	9	-
Moray .	: 3	13	Queen's County		2
Nairn	1 1	6	Roscommon	7	- 7
Orkney and Shetland		Š	Sligo	2	- 1
Peobles .	20	48	Timerare	18	14
Perth .	. 33	84	Tipperary Tyrone	17	17
Renfrew	. 23	12	Waterford		
Ross .	. 12	22	Westmeath	7	6
	. 12	6	Wexford	4	5
Roxburgh	1 17	29	Wicklow	7	7
		Z	WICELOW	- 4	1
kirling	- 시 . 의	95	Total for Ireland		
Sutherland .	. 18	20	TOPET IOL TLOUWING	215	209
Wigtown	454	740	Total for Tinked Win	1 000	1 400
		746	Total for United Kingdom	1,299	1,629
Total for Scotland					•

An account showing the amount of notes circulated in England and Wales by Private Banks and Joint-Stock Banks and their branches, at the commencement of each year since 1855.

Year.	Bank of England.	Private Banks.	Joint Stock Banks.	Total.
1855	£20,852,000	8,948,067	8,104,170	27,899,237
1856	19,920,000	2,911,880	8.080,116	26,912,696
1857	20,007,000	8,729,209	8,051,574	26,787,783
1858	20,295,000	8,090,644	2,473,473	25,868,117
1859	20,484,689	8,848,026	2,904,770	26,692,485
1860	21,831,820	8,594,285	8.071,658	28,497,208

The following is a List of the several Private and Joint-Stock Banks which have ceased to issue their own Notes since the passing of the Bank Act of 1844, with the dates when they ceased to issue, and the causes:—

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Date of last Return.	NAMES.	No. of Banks	Amount
	l. Bristol Old Bank—Baillie Ames & Co Bk. of Engl. Notes	1	£89,540
Prior to !	2. Bishop Waltham, Hanta.—Gunner & Co. Ditto	î	1,998
	3. Cambridge Bank—Fisher and Sons Ditto	l i l	8,753
October,	4. Ditto Humfrey and Son - Closed, 1845 -	i	2,615
1844,	5. Margate Bank—Cobb & Co Bk. of Engl. Notes		9,996
when the	6. Oxford University & City Bank—Sir John		
Act came	Lock and Co Ditto	1	15,705
into ope-	7. Staines Bank—Thomas Ashby & Co Ditto	1	9,244
ration.	8. Wrexham and N. Wales Bk.—R. M. Lloyd Ditto	1	4,464
`	9.*Western District Joint-Stock Banking Co. Dissolved	5	18,125
			100 100
	Total Issues given up prior to the Act of 1844 taking effect amount to		160,435
April 12, 1840	10. Whitby Bank - Frankland & Wilkinson - YorkCity&County	6	2,076 7,449
Sept. 13,	11. Suffolk Joint-Stock Banking Company - Dissolved 12. Dover Union Bank—Latham & Co Bankrupts	ĭ	9,577
	13. Stockton and Durham County Joint-	•	3,011
July 4, "	Stock Bank Dissolved	2	8,290
Oct. 10, "	14. Romsey and Hampshire Bk.—Wm. Foot-	-	9,200
	ner & Sons Bk. of Engl. Notes	1	8,875
Dec. 5, ,,	15.*Leeds & West Riding Joint-Stock Bank-	_	-,
	ing Company Dissolved	3	18,937
May 29, 1847	16. Leeds Commercial Joint-Stock Bank - Ditto	1	18,914
Oct. 9, ,,	17. Abingdon and Wantage—Henry Knapp Bankrupt 18. Penzance Union Bank—Ricketta, Entho-	2	29,316
n n	18. Penzance Union Bank - Ricketts, Entho-		
	ven & Co	4	81,461
Oct. 16, ,,	19. Leek & Congleton-Fowler, Gaunt & Co. Bk. of Engl. Notes	2	4,009
Oct. 23, ,,	20. Salisbury and Fordingbridge Bank — Bro-	_	
	die & Co Bankrupts -	2	23,335
19 39	21. Shaftesbury and Hendon Bank-Brodie	_	
	& King Closed	2	9,813
Oct. 80, "	22. Shrewsbury & Market Drayton—Adams	_	0.500
	& Warren Bankrupts -	2	9,700
NT - 0 19	23. Honiton Bank—Flood & Lott - Ditto	1	19,015
Nov. 6, ,,	24. Bridport Bank—Gundry & Co Ditto 25. St. Albans & Herts Bank—Gibson & Sturt Closed	5 1	24,606 2,333
Nov. 27,	26. Grantham Bank—Kewney & King	2	19,401
Oct 7	27. Sheffield and Retford Joint Stock Bank - Closed -	2	18,744
Dan 0	28. St. Albans Bank—John Samuel Story - Bankrupt -	ī	8,743
Dec. 23, ,,	29. Wrexham BankSamuel Kenrick - Closed -	l i l	8,289
	30. Yeovil Old Bank - Mesers. J. & H. B. Batten Bk. of Engl. Notes	l i l	10,033
Oct. 20, ,,	31. Christchurch Bank-Messrs. Tice & Welch Closed	•	2,840
	32. Reigate and Dorking Bank—Messra Nash		
=	& Neale Bankrupts -	1	18,700
Jan. 1851	33. Bedford and Bedfordshire Banking Co.—		
_	Trapp & Co Closed		8,515
Jan. "	34. Peterboro' Bank—Simpson & Co Closed B5. Oxford Bank - J. & R. Morrell		12,832
Feb. "	35. Oxford Bank - J. & R. Morrell		14,277
May "	36. Mariboro' and North Wilts-Ward & Co.		12,490
June "	37. Bromagrove Bank—Rufford & Co Bankrupts		16,799
Oct. "	38. Stourbridge Bank—Rufford & Co Bankrupts		17,295
	39. Newport Öld Bank—Williams & Sons - Bankrupts 40. Warminster & Wiltshire Bank—Everett, Rayenhill, & Co		8,600
Aug. 28, "	41. Stourbridge Old Bank—Bate & Robins—(United with Mid-		24,896
Aug. 20, 11	land & Birmingham Joint-Stock Bank)	}	17,560
Jan. 99 1853	42.*Newcastle, Shields, & Sunderland Union	1	11,000
Jan. 20, 1000	Joint-Stock Bank Dissolved	1	84,130
April 23, "	43. Mariborough Bank-Tanner & Co Closed	1	19,078
Aug. 6, ,,	44. Walsall Old Bank-Charles Foster & Sons-(Incorporated		,
	with Birmingham Banking Company)	Į į	19,937
June 3, 1854	45. Winchester & Hampshire Bank—Wickham & Co	l	6,737
Oct. 6, 1855	46-Storey & Thomas Bank—Shaftesbury	1	9,714
Nov. 24, 1855	47. Cardiff Bank - Towgood & Co(Incorporated with West of	1	i -
=	England & South Wales District Banking Company)	ł	7,001
Dec. 29, ,,	48. Lichfield BankPalmer & Green - Bankrupts -	4	22,786
April 5, 1856	49°Cheltenham & Gloucestershire Banking Co. 50. Hertford & Ware Bank—S. Adams & Co. Bankrupts	1	12,786
July 12, "	50. Hertford & Ware Bank-S. Adams & Co. Bankrupts -	1	23,635
Aug. 9, "	51. Hemel Hampstead Bk.—Smith & Whittingstall, Bankrupts-	4	28,842
	Chamba & day		4010.000
	Carried forward, -		£812,88 6

	Brought over		- £812,888
	Knighton Bank—Davies & Co	4	1 9,090
Oct. 11, ,, 58.	Bath City Bank-G. Moger & Son	4	4,672
Dec. 6 54.	Worcestershire Bank—Farley, Turner, & Co	-1	14,308
	Kettering Bank-John C. Gotch & Sons, Bankrupts -	-	9,192
June 27, , 56.	Kettering Old Bank-Smith, Hilder, & Co. Bankrupts -	٦	38,038
	Stone Bank-W. Moore	4	9,154
	Worcester Bank Farley, Lavender, & Co. Bankrupts -	_	15,463
	Birmingham & Warwickshire Bank-J. L. Moilliet & Sons	-	18,132
	Blandford Bank-Oak & Snow	_1	9,723

16

Total Reduction in the Circulation under Act 7 & 8 Vic., c. 32, to Nov. 1859 £940,561
51 Private Banking Firms, with Branches £748,472
*9 Joint-Stock Banking Companies - 192,089

£940,561

STATE OF THE FIXED ISSUES IN NOVEMBER, 1859.
Original fixed issue of 203 Private Banks (England and Wales) by the
Act of 1844
Deduct 51 Private Banks, since ceased to issue £5,153,407 748,472 Present amount of fixed issue of 151 Private Banks
Original fixed issue of 72 Joint-Stock Banks, by same Act - 3,495,446
Deduct 9 Joint-Stock Banks, since ceased to issue - - 192,089 Present amount of fixed issue of 63 Joint Stock Banks 8,303,357

Fixed issue of Private and Joint-Stock Banks - 27,766,393
No alteration has taken place in the fixed issues of the Irish Banks since the Act of 1844. The following is, therefore, the exact present state of the fixed issues:-SUMMARY.

Total fixed issue of Banks in the United

Kingdom on the 3th November, 1859 -£31,287,057

VI. Scottish Banks.—The confidence felt in the security of Scotch banks has been much shaken, not only by the failure of the Royal British Bank, established in London on the Scotch principle, but also by the suspension of the Western Bank of Scotland of Glasgow, in November, 1857, which brought ruin on a great many persons. The Edinburgh and Glasgow Bank was united in July, 1858, with the Clydesdale Bank, and the Perth Banking Company, in August, 1857, with the Union Bank of Scotland. The following table shows the present position of the Scotch Banks. present position of the Scotch Banks.

Place.	When Esta- blished.	No. of Part- ners.	Paid-up Capital	Dividen per cent. in 1859.	Fixed issue.	Actual is- sue in 1858.
Aberdeen.			£	£	£	£
Aberdeen Town and County Bank	1895	485	134,575	9	70,188	128,194
N. of Scotland Banking Company	1886	1331	200,000		154.310	189,580
Edinburgh.			1			
Bank of Scotland	1695		1,000,000	. 8	300,485	445,487
Royal Bank of Scotland -	1727	Stock.	2,000,000	' 6	188,000	416,128
British Linen Company -	1748	Stock.	1,000,000	9	438,024	491.550
Commercial Bank of Scotland -	1810	646	600,000	10	874,880	492,354
National Bank of Scotland -	1825	1393	1,000,000	8	297,024	407,101
Union Bank of Scotland - Dundee.	1880	1095	1,000,000	•	454,846	543,941
Dundee Banking Company -	1763	80	60,000	' 10	83,451	41.870
Eastern Bank of Scotland - Inversess.	1838	400	114,020		88,696	85,180
Caledonian Banking Company • Glasgoso.	1888	755	125,000) B	58,484	67,206
City of Glasgow Bank	1839	1300	670,000	¹ 3	117,921	238,434
Clydesdale Banking Company	1838	1307	807,880		240,685	267,873
Central Bank of Scotland	1834	420	78,125	9	42,938	55,012
	l	9212	8,789,100		2,794,262	3,913,710

VII. BANKS IN IRELAND.—The number of Irish banks it will be seen has not increased in the last twenty years. There are now but eight against nine then existing. The Agricultural and Commercial Bank of Dublin has been wound-up. The Tipperary Bank, owing to the Sadleirs' frauds, failed; and the Clonnel and Carrick-on-Suir National Banks were amalgamated in December, 1856, with the National Bank. The paid-up capital of the Irish Banks is almost uniformly the same as it was twenty years ago, for it then stood at £4,926,511. The last Act of Parliament for regulating banks in Ireland, is the 8 and 9 Vic. cap. 37, passed in the year 1845.

JOINT-STOCK	BANKS	OF	IRELAND	IN	1860.
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Place.	When Esta- blished.	No. of Part- ners.	Paid-up Capital			Actual is- sue in 1858.
Dublin.			£	£	£	£
Bank of Ireland	1788	-	3,000,000		8,738,428	8,223 777
Hibernian	1825	l —	250,000	5	No issue.	` - -
National Bank—head office in London	1835	515	500,000	9	85 2,269	1,037,691
Provincial Bank of Ireland— head office in London	1825	1000	540,000	20	927,667	923,517
Royal Bank of Ireland Belfast.	1836	640	209,175	10	No issue.	-
Belfast Banking Company -	1827	261	125,000	12	281.611	359,770
Northern Banking Company	1825	224	150,000		243,440	258,620
Ulster Banking Company	1835	401	183,405		811,079	879,690
		8041	4,957,580		6,854,494	6,183,065

Account showing the monthly average amount of Notes circulated in England and Wa es by Private and Joint-Stock Country Banks, and their branches.

	Private.	Joint-stock.	Total.
1855, March 8	8,733,792	8,000,238	6,784,030
., June 2	8,800,342	8.043,629	6,843,971
" September 1	3,601,480	2,927,357	6,528,787
" December 1	8,876,412	8,096,088	6.972.500
1856, March 1	8,675,178	2,967,219	6,642,392
" June 7	3,742,978	2,9:7,600	6,740,573
, September 6	8,571,057	2,964,682	6,585,720
" Doggmbar 6	8,725,302	8,057,250	6,782,552
1857, March 7	8,652,033	3,052,571	6,704,604
" June 6	3,679,387	8,027,839	6,706,226
"September 5	3,525,474	2,945,066	6,470,540
" N	8,239,479	2.641.454	5,880,933
1858, March 18	2,059,999	2,552,039	5,612,038
Tune 6	8,311,335	2,880,067	6,191,402
" Company Day Of	8,225,500	2,805,905	6,081,405
, December 18	8,327,369	2,877,258	6,204,622

BANKS FOR SAVINGS. On the 20th November, 1858, there were in England 473 Savings Banks, holding £30,859,679, belonging to 1,169,595 depositors, being on an average about £26. 10s for each depositor. At the same time there were also in Wales 32 Savings Banks, holding £907,384, belonging to 30,376 depositors, being on an average nearly £30 to each depositor. In Scotland there were 47 Savings Banks, holding £1,960,610, belonging to 123,273 depositors, being an average of close upon £16. In Ireland there were 52 Savings Banks, holding £1,804,163 in deposits, belonging to 59,893 depositors, an average of over £31 each. There were two Savings Banks in the Channel Islands, holding £415,506, belonging to 15,749 depositors, or an average of about £26. The recapitulation shows a gross amount of deposits of £35,947,341 in 606 banks, by 1,398,886 depositors. The aggregate rate of interest paid is £2. 18s 10d per cent. On the 1st January, 1859, the capital held by the Savings Banks was £36,193,400, of which £31,505,130 was in England, £906,927 in Wales, £1,960,299 in Scotland, and £1,821,044 in Ireland. The trustees had received from depositors in the year 1858, £7,901,925, and paid out

£7,839,903. On the 20th November, 1859, the amount of deposits, including interest lodged in savings banks, was £40,997,630; the individual depositors were 1,479,723, and there were besides 27.633 charitable and friendly societies as depositors. The following shows the distribution of savings banks and their progresssion in different parts of the kingdom.

	England.	Wales.	Scotland.	Ireland.	Total United Kingdom.
1854	460	27	46	52	585
1855	463	29	47	52	591
1856	469	81	47	52	599
1857	473	82	46	51	603
1857	478	82	47	51	606

From the foregoing details, compared with the statements given in the body of the work, it will be seen that in 20 years there has been an increase of about 141 millions in the amount of deposits in Savings Banks.

BASKET RODS. In 1858 the quantity of osiers imported was 96,722 bundles peeled, worth about 4s 6d per bundle, and 133,029 bundles unpeeled, worth about 2s 4d per bundle. The aggregate value of these was £37,453. They came chiefly from Holland, Hamburg, and Belgium. We also imported 145,695 cubic feet of baskets, worth at 4s 4d the cubic foot, £31,567. There has been a duty of 4d per cubic foot since August 8. 1854, which brought in

2416 in 1858. We import the bulk of these from France.

BAVARIA. The population in 1852 was, including 86,838 military,
4,558,658 souls, or 153 to the square mile. The revenue in 1854 was £3,478,568,
and the expenditure £3,732,551. The deficit was made up by a lottery and an increase of direct taxes. The public debt of Bavaria in 1851 amounted to £13,699,562. The number of mines in the kingdom in the year 1854-55 was 550, employing 3908 work-people. There were also 135 smelting works, foundries, &c., in which were employed 3811 persons, and eight salt mines, &c., employing 2913 hands, and producing 923,116 cwts. of salt of different kinds. The total value of the mineral produce at the place of production was about one million sterling. The quantity of coal and peat obtained was 3,287,398 cwts.; million sterling. The quantity of command pears obtained was 0,267,050 cmm., 363,373 cwts. of raw or pig iron was made, 325,592 cwts. of rolled or bar iron, and 2848 cwts. of steel; a large quantity of vitriol, besides antimony, alum, &c. In the 12 years ending with 1857, 66,721 persons had emigrated from the Palatinate chiefly to North America, of whom 36,511 were females.

BEEF. The importation of beef, fresh or cured, like all articles of provisions,

is now free, the duty having been abolished on the 19th of March, 1846. imports in 1858 were 168,496 cwts. of salt beef chiefly from the United States,

and 62 cwts. of fresh or slightly salted from Holland.

BEEF-WOOD. This Australian wood, sometimes called in the colony the swamp oak, is now referred to the Stenocarpus salignus.

At the close of 1859 there were in the United Kingdom 2497 licensed brewers, of whom 2268 were in England, 86 of these carried on business in London. Manchester stands first in the number of provincial brewers, 100 being returned for that district. Cambridge ranked second, having 91, then followed Newcastle with 77, Durham and Hants with 74 each, Liverpool with 73, Surrey with 65, Hull, and other localities in smaller numbers. Scotland had 120 brewers; Edinburgh with 20, Stirling, Perth, Haddington, 14 each, Ayr and Dumfries following in rotation.

Ireland had 109, of these 16 carried on business in Dublin, 15 at Naas, 10 at

Galway, and 7 in Waterford.

But besides these brewers, par excellence, there were in the United Kingdom, 93 066 licensed victuallers, of whom 24,808 brewed their own beer. There were 40,537 beer retailers licensed to have beer drank on their premises, and of these 11,420 brewed their own beer. 909 out of 2,898 beer-shop keepers not licensed to have beer drank on the premises were brewers.

The following is an account of the number of Licenses granted for the manufacture and sale of Beer in the United Kingdom, and the amount of duty

charged in the year ending 31st of March, 1857.

	Quantity.	Duty.
Brewers of strong beer	40,568	£77,554
,, table beer	225	152
Retail brewers	56	807
Brewers from sugar	461	461
Sellers of strong beer	1,662	5,495
secording to rating	80,168	160,326
To be drunk on the premises	39,608	130,995
Not to be drunk on the premises	2,702	2,985

Brewers of strong beer are charged a license duty of from 10s 6d to £78. 15s per annum; of table beer, 10s 6d to £2. 2s per annum; retail brewers, £5. 10s 3d; and brewers from sugar, £1. per annum; sellers of strong beer, not being brewers, £3. 6s 1½d per annum; retailers charged according to rating of premises, £1. 2s 0½d and £3. 6s 1½d per annum. Retailers of beer to be drunk on the premises, £3. 6s 1\frac{1}{4}; Retailers of beer not to be drunk on the premises, £1. 2s 0\frac{1}{4}.

The proportionate consumption of malt in the several divisions of the kingdom

as as follows:	_	1857	1859
England		4,142,587	4,876,912
Scotland		.53,5657	192,879
Ireland		.260,491	296,614

Now taking the average of one quarter of malt for three barrels of beer, we may arrive at an approximation of the quantity of ale and beer relatively made in each country, which would be about as follows in 1857:-

England	***************************************	12,427,761	barrels.
Scotland	***************************************	460,695	113
Ireland		781,478	19
		13,661,929	**
Equal to	***************************************	492,117,447	gallons.

Deducting the quantity exported in that year, we have 476,458,131 gallons left for home consumption, which if equally divided among the whole population (of say 28,000,000) would give a proportion of 17 gallons per head as the average annual consumption. Ireland and Scotland drink, however, but a small quantity of malt liquor, whiskey being the favourite beverage. Viewed relatively to the proportion of malt made, the consumption of beer and ale per head in each division of the kingdom would be as follows, after allowing for that shipped, which we will even take to be all of English brewing, England:—Malt made which we will even take to be an of England brewing, England:—matt made (deducting therefrom that required for the beer exported) 4,520,000 quarters. This would give 28 gallons of beer per head of the population per annum. Ireland:—Malt made, 219,866 quarters, equal to 659,598 barrels of beer; or about five gallons per head per annum to the population. Scotland:—The consumption of malt by brewers, was only 153,565 quarters, or less than one-third of the quantity used in distillation. The consumption of beer would therefore only be about five gallons per head, or about the same as in Ireland. The exports of beer and ale have been largely increasing of late years, keeping pace in some degree with the extension of settlement and colonization. To the East Indies and Australia the shipments are very large. But it is since 1852 that the greatest progress in the shipments has been made. Previous to that year the value of the shipments was only about half a million sterling. In 1859 the exports reached 613,831 barrels, of the value of £2,116,207.

BELGIUM. The population of this kingdom has increased about half a million in ten years. The numbers in each province in 1850 were as follows:—Antwerp, 420,556; Brabant, 734,617: W. Flanders, 631,137; E. Flanders, 783,450; Hainault, 733,740; Liege, 467,843; Limburg, 188,198; Luxemburg, 192,588; Namur, 274,073; total, 4,426,202. The anticipated public revenue in 1856 was £6,029,660, and the expenditure £6,552,992. The public debt of the kingdom on the let Lenger 1841, mag £94,854,077. the kingdom on the 1st January 1851, was £24,854,079. The number of vessels that entered the Belgian ports in 1855, was 2558 vessels and 441,554 tons, of which 128 ships and 17,252 tons were in ballast; of these 392 vessels, registering 5,732 tons, were Belgian. The official value of the imports and experts of erchandise, including those for transit, was as follows:—

	IMPORTS.	Exports.
1850	£17,697,940	£18,804,600
1851	17,802,680	18,350,000
1852	20,960,840	20,868,320
1858	22,568,680	25,205,220
1854	24,877,920	28,539,060
1855	27,145,480	27,921,920

At the close of 1855 there were 480 miles of railway completed in Belgium, at a cost of construction of £7,181,583. The traffic returns show that 5,073,042 passengers passed over the lines; 84,022 cwts. of passengers' luggage; 2,099,648 tons of merchandize, and 12,766 head of cattle and horses. The total receipts for goods and passengers were £932,346, and for telegrams, £10,637. expenditure on the lines was £532,717. The miles traversed, 43,447,814.

In the sitting of the Belgian Senate in 1860, the Duke de Brabant (the heir to the throne) spoke at considerable length upon the commercial prospects of Belgium. The question under discussion was the Budget for Foreign Affairs. After alluding to the commerce of Belgium 25 years ago, and its present prosperous condition, his Royal Highness said:—"Official returns show, in fact, that our special commerce, which really represents the proper movement of the country, has tripled since 1836. The special exportation—that is to say, that of national produce—during the period from 1840 to 1858 has followed this progress, as in France and England, as will be seen from the following figures:—

1840.

1858.

Increase.

1858, 2,915,000,000f 1,980,000,000f 424,000,000f 127 per cent.

Thus, it will be seen that Belgium has, relatively, made more progress than her neighbours, yet the latter have not been inactive." His Royal Highness, after neighbours; yet the latter have not been mactive." His Koyal Highness, after passing in review the industry of Belgium as it now exists, dwelt upon the necessity of opening new markets for Belgian produce, and of appointing Belgian agents in every part of the world. To do this effectually, Belgium ought to have a great commercial port—and that port should be Antwerp.

BILLS OF EXCHANGE. From some very elaborate calculations and inquiries, carried out by Mr. W. Newmarch, extending over a period of ten

years and upwards, he deduced the following facts:-

	In Circulation at one time.	Under Discount at one time.	
In Scotland (Inland Bills)	£18,000,000 12,000,000 70,000,000 16,000,000	£15,000,000 12,000,000 60,000,000 13,000,000	
	116,000,000	100,000,000	

Out of the hundred and sixteen millions in circulation there would therefore be sixteen millions of bills and notes not discounted by the holders of them, of which three millions of the inland bills held would be in Scotland, ten millions in England, and three millions foreign bills not discounted.

BLACK-WOOD. This is a name given to an East Indian furniture wood, obtained in Malabar, from the Dalbergia latifolia. It is locally termed rose-wood.

BLANKETS. This branch of the woollen manufacture shows a considerable progress, as marked by the exports. In 1858, 5.850,129 yards of blankets were shipped of the declared real value of £396,011; of these 3,691,412 yards went to the United States; 914,530 to Australia, and 357,983 to British N. America.

BOARD OF TRADE. A common term for an official departmental branch

of the Government, having jurisdiction over the trade and navigation of the

country. It consists of a President and Vice-President, and the committee of the Board are termed the Lords Commissioners of the Privy Council of Trade. have under their control the collection and publication of the Statistics of Trade, the Navigation laws, inquiries into losses of vessels, and other similar duties.

BOLIVIA. The area of this South American republic is 374,480 square miles, and the population 1,750,000. We import about £40,000 worth of merchandise

annually from Bolivia, but export no manufactures thereto.

BONES. The trade in bones has now reached to a very large extent, not only remanufacturing purposes but also as a fertilizer for the soil. The foreign imfor manufacturing purposes but also as a fertilizer for the soil. The foreign imports at present exceed 85,000 tons, valued at £466,760, while those collected at home are computed at nearly the same amount. Those imported average about £5. 10s per ton; the price having more than doubled within the last ten years. Those obtained at home are more valued in consequence of the gelatine they contain. Some of the shank and other bones are used for handles to knives, forks and tooth brushes, and for buttons, combs, &c. and the bone waste or dust, after they are boiled and crushed for manure. The prices in London in the early part of 1860, were for bone ash, £4. 10s to £4. 15s per ton.; 1 inch bones per quarter, 17s to 18s; bone dust, 19s to £1.; animal charcoal, £4. 5s to £4. 10s.

BOOKS. In 1787 the duty on imported books, if bound, was 19s. 3d. per cwt. In 1819 it was advanced to £6. 10s. the cwt. for bound books, and £5. for unbound. By the stat. 41 Geo. III. (1800) c. 107, sec. 7, the importation of reprints of English copyright works was forbidden on pain of forfeiture, $\pounds 10$. penalty, and double the value of the books.

In 1838 books printed prior to the year 1801, whether bound or unbound, were charged an import duty of £1. the cwt., and those printed subsequently to 1801, £5, the cwt. Books in the foreign living languages, printed since 1801, £5. the cwt. Books in the toreign fiving languages, printed since 1801, were, under the 4th and 5th Will. IV., c. 89, reduced to £2. 10s. the cwt.; and foreign reprints of English books imported for sale were, by 3 and 4 Will. IV. c. 52, s. 58, prohibited, under penalty of forfeiture. By 7 Vic. cap. 12 (10 May, 1844), the importation of English copyright books was again prohibited. In 1845 the rates of duty on original works in the language of the country of

export was 15s per cwt.; on other works published in the country of export, if printed prior to 1801, £1. the cwt.; and printed subsequent to 1801, £2. 10s. printed prior to 1801, 21. the twit, and printed subsequent to 1801 were admitted duty free. On the 11th June, 1853, books printed previous to 1801 were admitted duty free. On the 11th June, 1853, the following new rates were imposed:—Editions printed since 1801, in all languages, 21.10s. per cwt., excepting those admitted under treaties of international copyright, which were 15s. per cwt.; books of and from any British possession, 15s. per cwt. The following figures give the official value of the books bound or unbound imported, and the declared value of the books exported from the United Kingdom:—

	Books In	Books Imported.			
Years.	Official Value. Duty Received		Declared Value.		
	£	£	L		
1846	83,929	9,201	174,981		
1847	40,122	8,843	200,485		
1848	32.840	7,762	192,145		
1849	81,949	7,751	205,236		
1850		· 1	229,399		
1851			268,032		
1852	Weight.		239,433		
1858	4,472 cwt.	5,880	452,062		
1854	4,988	4,512	445,358		
1855	5,003	4,386	875,942		
1856	5,811	5,054	429,241		
1857	6,439	5,649	426,521		
1858	5,484	5,186	397,090		
1859			478,287		

The largest quantities of books are shipped to the United States, Australia, India, Egypt (for transit), British North America, France, and Holland.

BOURBON. The population of this French Colony was in 1852,106,302 souls, and the entries of vessels 261, of which 255 of 68,861 tons were French. The value of the imports was £1,053,028, and of the exports £905,917. Looking at the value of its exports, Bourbon is the most important of the distant colonial possessions of France. The principal imports were 1824 mules; 2074 cattle; 531,628 kilogrammes of meat; 937,265 kilogrammes of cod fish; 432,027 of lard; 584,519 kilogrammes of olive and cocoa nut oil; 474,180 kilogrammes of soap; 5,440,534 litres of wine; cotton fabrics value about £300,000; 2,474,328 kilogrammes of wheat; 318,828 of flour; and 1,737,478 of grain. In 1852 were imported 29,355,291 kilogrammes of sugar; 1,664,131 of rice; 195,947 of coffee; 82,738 of cloves; 157,289 of sesame seed; and 25,451 of unmanufactured tobacco.

BRANDY. The duty on foreign brandy which had stood at 15s per gallon, since 18 March, 1846, was reduced in March, 1860, to 8s 6d per gallon. The quantity imported has been very variable in the last sixteen years, ranging from 1,500,000 gallons in 1844, to 5,000,000 gallons in 1853, but the average imports may be taken at 2,500,000 gallons, and the home consumption at half that quantity. The average prices exclusive of duty were in 1854, 8s 4d; 1855,

9s 9\d; 1856, 10s 2d; 1857, 12s 10\d; 1858, 12s 9d; 1859, 7s 6d per gallon.

The production and export of brandy or spirits from France have been as follows in hectolitres of 22 gallons:—

	Production.	Export.	1 1	Production.	Export.
1840	984,825	j 200,669	1855	856,899	153,516
1845	663,369	138,456	1856	944,685	192,179
1850	959,847	288,384	1837	1,828,928	170,616

Between the years 1852 and 1858, 844,136 hectolitres of alcohol for the prepa-

ration of brandy were imported into France.

In 1854, the production of brandy in France was 914,140 hectolitres, and in 1857, 947,379 hectolitres. The state of the trade in 1854 induced the French Government to lower the duty on foreign brandy to 15 francs per hectolitre. Under this remission the imports increased from 12,800 hectolitres, at which they stood in 1853, to 61,000 hectolitres in 1854, and to 202,888 hectolitres in 1855, when the remission came into full play, and finally to 376,549 hectolitres in 1857, not-withstanding the large amount of home-made spirits during that year, as stated above. In 1854 the price of brandy in France stood as high as 280 france the hectolitre. The duty on foreign brandy was increased to 25 francs in Dec. 1857; the available stock was then larger than the consumption, the proportions being—

810	CE.		Hect.	l		COMMUNIPTION.		Hect.
Home produce Imports -	:	:	947,379 376,549	Home Exports	-	•	:	846, 589 170,61 6
-			1,323,928	1				1,017,205

Leaving a balance in hand of 306,723 hectolitres, the largest which had ever occurred since 1848. The quantity of brandy on hand in France in Jan. 1858, occurred since 1848. The quantity of brandy on hand in France in Jan. 1838, was 965,276 hectolitres. In 1854 the exports amounted to 155,111 hectolitres heing 94,111 hectolitres more than the imports. The latter exceeded the former in 1857 as already shown, and also in 1855 when the numbers were, imports, 202,888 hectolitres; exports, 153,516. The proportions in the year 1858 were completely reversed, the quantities being—imports, 512 hectolitres; exports, 137,482. The imports of brandy into France have now totally ceased, and the country resumes its place as a large exporting State. The annual quantity of brandy consumed in Paris was in 1858 of the value of 15,047,500 france, being at the rate of 14 francs 28 cents per inhabitant, or 14 centimes per day. Owing to the vine disease, attention was directed to the distillation of brandy from other substances, and in 1857 the proportions distilled from each kind were-

Other substances	•	-	847,379	10
Farinaceous substances Wines and lees	-	-	100,000 133,000	11 21
Beet-root Molasses of all kinds	:	-	429,000 h 150,000	ectolitres "

Shipments from Char-	ente to G	ìre	at Britai	in, 30th June, 1857, to	80th	June,	1858.
•			Hhds.			•	Hhds.
G. Salignac (United Vine	vards P. C	a)	8060	Brought up	-	-	18,812
James Hennessy and Co.	•	-	2220	G. Sayer and Co.	-	-	486
Otard, Dupuy, and Co.	-	-	1648	Augier Freres -	-	-	292
Renault and Co.	•	-	1204	Sazerac, Forge et Fils	•	-	210
J. Duret and Co. (Vine Gr	rowers' Co.	.)	1000	Thomas Hine and Co.	-	-	200
J. Rizat -	•	-	996	N. C. Godard and Co.	-	-	168
P. Boutilleau (Champagn	e Vineyar	ď		Roullet and Co.	•	-	156
Ps. Co.) -		-	860	Planat and Co.	-	-	145
Martell and Co.	-	-	692	Pinet, Castillon, and Co.		-	194
Arbouin, Marett, and Co.		-	689	Le Coq Freres -	-	-	116
Denis, H. Mounie, and Co			552	Dulary, Bellamy, and Co.		-	116
C. Huvet & Co. (Anglo-At	nstralian C	ZO.	448	Caminade and Co.	-	•	20
Jules, Robin, and Co.	•	•	444	Sundries -	•	-	8092
Carried over	-	-	18,812	Total	-	-	94,156
CD0 - C 11 1				TAX		**	Girl III

The following shows the imports and exports of brandy, in gallons, in the United Kingdom; the difference will be the home consumption and stock held. The consumption in the three years ending 1859, averaged 1,235,560 gallons.

	-:	Imported.	Re-exported.	1 1	Imported.	Re-exported.	
	1846 ;	2,437,203	639,784	1858	5,005,911	2,378,770	
	1847	2.728,471	978,860	1854	2,963,027	1,113,586	
•	1848	2,429,089	846,405	1855	1,943,908	910,423	
	1849	4,479,549	1.134.052	1856	2,540,438	1,539,075	
	1850	3,237,464	971,997	1857	2,900,250	1,047,759	
	1851	2,930,967	1,029,533	1858	1,064,663	671,475	
	1852	3,959,452	2,199,997	1859	4,030,134	1,054,171	
	Anetrolia is	o lerge	metamer for	brandy, the	shinmente	to those C	L

Australia is a large customer for brandy; the shipments to those Colonies from Engand and the Continent having been, in gallons, in .-

Lingano	and me	Contain	ent naving	Deen, n	n Kamoma' n	.:	
1853	-	-	2,071,346	1856	•	-	1,228,177
1854	-	-	577,678	1857	•	•	986,442
1855	-	-	477,016	1858	-	-	594,554
		1859	-	•	915,149		•

Although a favourite spirit from its purity, the heavy duty had hitherto kept down the consumption of foreign brandy, and British brandy took its place in many quarters. The total proof gallons of British brandy "permitted" from rectifiers' stocks were as follows:—

```
    1638
    -
    -
    315,945
    1845
    -
    -
    398,433

    1899
    -
    -
    314,567
    1846
    -
    -
    371,786

    1840
    -
    -
    308,063
    1847
    -
    -
    317,786

    1841
    -
    -
    332,091
    1848
    -
    -
    284,066

    1842
    -
    -
    313,675
    1849
    -
    -
    460,798

    1844
    -
    -
    360,417
    1850
    -
    -
    387,773
```

BRAZIL. The total population of this empire in 1856 was returned at 7,677,800. It is now divided into twenty provinces, 16 of which are named correctly in the body of the work, but in the place of Rio Negro and Fernando, there are the following: Rio Grande do Sul, Santa Catharina, Parana, and Amazonas. The revenue of the empire in 1858-59 was £4,380,900, and the expenditure £4,455,229. In 1857 the customs duty was derived from the following sources, on imports, £2,654,778; exports, £422,586; shipping dues, £21,759; inland taxes, £534,181; municipal taxes, £125,171; miscellaneous charges, £19,333. The public funded debt of the empire in January 1857 was, £6,415,978 internal debt, and £5,493,100 foreign debt; total, £11,909,078. The vessels which entered the ports in the year ending June 1857 were 371, of 32,167 tons, under the national flag, and 2404 of 853,536 tons, foreigners. The entries at the principal ports were as follows:—

				Vessels.	Tons.
Rio Janeiro		-	•	1102	515,984
Bahia -	•	-	•	817	95,193
Pernambuco	-	-	-	894	90,850
Maranhao	-	-		68	18,491
Para -	-	-	-	98	25,816
Rio Grande do St	ıl and co	ntiguous	ports	467	85,996
Santos -	•	-		68	21,951
Paranagua	-	•	-	55	14,978
Carried over	_	_		9560	918 754

In 1858 there were 213 British vessels of 51,515 tons engaged in the direct trade, which entered the port of Pernambuco, the value of their cargoes being £1,006,429, and 74 vessels of 20,581 tons, indirect, valued at £15,556.

The total value of the imports of Brazil in the year ending June 1857 was £13,761,773, and of the exports, £12,722,601. The quantity of coffee exported from Rio in 1855 was 2,409,543 bags; from Bahia the shipments in 1858 were 24,870 tons of sugars, 44,651 bags of coffee, 8465 of cocoa, 3212 of cotton, 108,915 hides, and of tobacco 1191 rolls, 44,351 mangotes, and 13,861 bales. There are two lines of steamers now running monthly from British ports to Brazil; the Royal Mail Company's steamers from Southampton, and the Anglo-Lusitanian from Liverpool. The exports of British manufactures to Brazil average in value about £4,000,000 to £5,000,000, and the imports thence £2,500,000.

By an imperial rescript, dated Rio de Janeiro, 18th November, 1858, the fol-

lowing regulations were established respecting the settlement of colonists.

Art. I. To those colonists who arrive at any port of the empire with their assage paid, and who wish to establish themselves in the colonies created by the

Government, purchasing land, it shall be sold on the following conditions:—

1. If paid for in ready cash, the price shall be 1 real per square fathom for the

better quality, \(\frac{1}{2} \) real for the inferior.

2. But if credit is taken, the price shall be 1\(\frac{1}{2} \) real and 1 real respectively

8. Those who buy on credit and pay the amount before it falls due shall have an abatement of 6 per cent for the time which shall be wanting to complete the term for the contract.

4. The colonists who shall purchase on credit cannot alienate nor subject to any onus whatever either the land or improvements thereon, both being mortgaged for the payment. This, however, does not interfere with the passing of the property by inheritance or by will; in either case the lands will pass to the heir or legates, but subject to the mortgage.

5. The title deed shall be passed by the Director-General of Public Lands in the capital, and by their delegates in the provinces, under the inspection and with the approval of the presidents of the same. They shall be given gratuitously,

without any pecuniary charge whatever.

6. If the families of which this rescript treats (which are those who shall form agricultural establishments) consist of five or six persons, and if they buy lands for ready money, the Government will pay the passage of one member; and if the families consist of more than six persons, the Government will pay that of two. It is, however, declared that in the number of persons composing a family those are not comprehended who shall be more than fifty or under twelve years of age.

7. To form a family it must be composed of husband and wife, or father and

children, or brothers and sisters, or guardians and wards.

8. Besides the gratuitous passages conceded by condition the 6th, the Govern-

ment will pay those of children under twelve years of age.

9. If the colonists arriving at one port of Brazil shall have to proceed to another in order to reach their settlement, the expenses of the passage to the second

port shall be at the cost of the Government.

10. On the lots of land which shall be sold the Government will order a house to be erected to serve provisionally, and will prepare the ground by clearing a space equal to 100 square fathoms; and also will furnish to each family or colonist established on his own account the seeds sufficient for that space during the first year; also, a horse or mule, an ox or cow, a cock and two hens, and a small This favour, however, will cease with the first year.

11. The benefits expressed in the foregoing paragraphs are assured only to the first 150 families who shall settle on any colony established by the Government. It is understood that to be entitled to the said benefits it is not necessary that

the colonist be married, it being sufficient that he buy land in the colony and

form an agricultural establishment.

12. To enjoy the benefits herein conceded the colonists must bring attestations from the Brazilian consul of their being persons of good conduct and of their being accustomed to agricultural work, and also of the relationship between the members of each family. (Signed) MARQUEZ DE OLINDA.

BREMEN. The area is 96 square miles, and the population in 1852 had risen to 85,000. The number of merchant vessels belonging to the port in 1855 was 264, registering 140,418 tons. The number of vessels that entered the port in the same year was 2557, measuring 398,446 tons, and employing 15,378 seamen; of these, 432 were in ballast. The British vessels employed show a progressive increase, and numbered 172 in 1855. The imports in 1855 by sea and land were

to the value of £8,875,829, and the imports to £8,354,053.

BRISTLES. The annual imports have now increased to about 2,000,000 lbs. During the war with Russia the brushmakers were sadly inconvenienced by the stoppage of supplies, and various substitutes were brought into use, consisting of

strong vegetable fibres and grasses, which having proved cheap and useful still hold their ground.

BRITISH COLUMBIA. This new British colony situate on the north-west coast of America, includes Queen Charlotte's Island (5,150 square miles), and contains in the aggregate 225,220 square miles. The boundaries of the colony on the continent are the 49th parallel of latitude on the south, a line running N.W. from the 114th degree of longitude along the Rocky mountain range, the Finley,

Simpson, and Bear rivers forming the northerly boundary.

The colony has attracted considerable notice in consequence of the gold fields on the Frazer and other rivers—which extend for hundreds of miles east and north of the coast. The site for the seat of government and seaport is in a position about 10 miles below the town of Langley, on the north bank of Frazer's River, and is named New Westminster. It is about 14 nantical miles within the sand heads, and here the rising ground begins. The river is 400 yards broad, or wider and deeper than the Thames at London Bridge; the shore is bold and suitable for wharves and quays for vessels to lie alongside, and ships with a fair wind might reach so far without difficulty under sail. The site is well placed, locally, in a military point of view, as it has the river between it and the boundary line. The channel into the river is rather tortuous. It is reported to have a depth of 18 feet at low water, with six feet rise of tide, and it is not exposed to any very heavy sea. Land is sold at 10s per acre. The progress of British Columbia in commerce is, on the whole, considering the smallness of the population, satisfactory. The value of the imports in 1859 was £117,219; the customs duties, including harbour dues, in the same period was £18,464. The other sources of cluding harbour dues, in the same period was £18,464. taxation are miners' licenses of £1 a year each, spirit licenses in towns £25 a year, and in rural districts £10 a year; wholesale licenses in town and country £10 a year; trading licenses in the mines £10 a month. These bring up the revenue to about £50,000, leaving a surplus after defraying all the civil and

judicial expenditure of the colony.

BRUNSWICK. 'The latest statistics give the population returns at 247,462 souls in 1854. 'The net revenue in that year from import duties was 217,841 thalers. The quantity of cotton imported in 1853 was 4764 centners or cwt.; of flax, tow, hemp, &c., 2452 centners, the quantity of flax &c., exported was, however, much larger, amounting to 5602 centners; of hops, 2356 centners; of Nuremburg toys and other fine wooden wares, 5109 centners, and of wooden furniture and household wooden wares, 1725 centners; of fancy wares of mother of pearl, metal, glass, &c., 6254 centners; hides and sole leather, 966 centners; beer and mead, 1605 centners; spirits 1639 centners; starch and maccaroni, 7180 centners; oil, 4449 centners; silk stuffs, 342 centners; mixed silks, 1085 centners;

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coals, 9215 centners; woollen goods, 22,683 centners; books and prints, 3529 centners. There were 8 beet root sugar manufactories in the State at the close of 1853, which consumed 736,101 cwt. of beet root.

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BUENOS AYRES. The area of the Argentine Republic is computed by the latest authorities to be 927,000 square miles, and the population 2,000,000. General Urquiza is the President of the Confederation. The computed net value of our imports from Buenos Ayres have averaged in the five years ending with 1858, £1,300,000. They consisted in 1858 of 4,776,965 lbs. of wool, 4,301,533 lbs. of tobacco, 833,350 nutria skins, 892,306 sheep and lamb skins, 58,856 cwt. of tallow, and 4421 cwt. of horse grease, 11,512 tons of bones, 121,123 cwt. of hides, 11,660 cwt. of horse hair, 268 tons of horns, and 556 tons of guano. The shipments of British produce and manufactures are a little over £1,000,000 in value, and there is also foreign produce shipped to the value of about £30,000 per annum. In the year ending May, 1855, \$60 vessels, measuring 202,672 tons, entered the port of Buenos Ayres. If the revolutionary dissensions in the River Plate were once definitively settled a large extension of commerce might be looked for, especially with the free navigation of the central rivers conceded. Free ports were recently established at Bahia Blanca, at the embouchure of the Colorado river, and at Carmen, at the mouth of the Rio Negro, while a town is forming at the entrance of the Salado near Cape San Antonio, so that extra facilities are thus afforded to commerce. A branch steamer runs with the monthly mails from Rio Janeiro to the River Plate.

BULLION. Since the last edition of this work was published very great changes have taken place in the supply of gold, by the discovery of important placers or gold fields in Australia, California, and more recently still in British Columbia. The California gold fields were first discovered in 1849, and in the eleven years, ended 1859, are estimated by competent authorities to have yielded gold of the value of about £123,000,000 sterling. The Australian gold fields, although discovered a year or two later, are estimated to have produced between 1851 and 1859 gold of the value of £88,000,000 sterling. The colony of Victoria has been the most productive, although gold is obtained in New South Wales, and has been found in Tasmania and New Zealand.

Immense sums of gold have within the short period of eleven years been added to the previously existing stock. We believe the following to be the best estimate of them which we can publish:—

1851. £ 8,654,000 Brought over . £88,235,000 1856 . 1852. 15,194,000 21,275,000 1853. 22,435,000 1857 . 21,366,000 22,077,000 1858 . 1854. 20,747,000 1855 1859 19,875,000 21,000,000

Carried over £88,235,000 | Total . . £172,623,000

It is still a question for discussion whether these immense supplies have as yet had any effect on the value of gold at all. There is one very striking fact, which would seem to indicate that they have had no effect—the price of silver: the

1851		•		. (ł. 60 <u>1</u>	1856	•			•	d. 60
1852	•	•			61 j			•		•	614
1853	•	•	•		60		•	•	•	•	61#
1854	•		•		61#	1859		•			614
1855	•				60 1	1860		•	4	•	621

Whence it is evident that there has been no very material fluctuation. Now there are some circumstances which would render it more probable that there would be a rise in the gold-price of silver, than in the gold-price of any other article. While gold from new supplies, must have had, apart from other circumstances, a tendency to be depreciated, silver, from a new demand, must

have had a tendency to become of greater value. The enormous increase of our imports from the East has led to a most unusual export of silver, the only commodity which the Orientals will take in payment for them. The following table was laid before the Committee of the House of Commons on the Bank Acts:—

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Exports of Silver to the East from Great Britain and the Mediterranean.

1851			£ 1,716,000	1855	• ′		7,984,000
1852	•	•	2,630,000			•	14,108,000
1853	•	•	5,559,000		•	•	20,146,000
1854	•	•	4,588,000				
				Total		_	56,678,000

The tendency of a sudden demand for so great a sum in silver to augment its value is evident. It is true that a large quantity of silver has been liberated in the same period from the currency of France (M. Chevalier estimated the amount at £45,080,000 down to the 1st of January, 1858); but, even taking this into the account, the great drain for exportation to the East must have had rather a tendency to produce an augmentation of value. Nevertheless we see that no such augmentation has taken place, but that the relative values of silver and gold continue to be what they were eight years ago. We scarcely see how this is compatible with a depreciation of gold at present. Those who believe that there is such a depreciation, must prove that there are in the case of silver counteracting circumstances which make it an exception to the general rule, and prevent its gold-price from rising when the gold-prices of other commodities are rising. But we have never seen any attempt to indicate such circumstances, and we do not believe that any such exist; on the contrary, we conceive that from its intrinsic tendency to rise in value, silver would almost certainly be affected by a simultaneous depreciation of gold if any such existed.

The teaching, therefore, of the experience of the last few years is, that the value of gold is not very easily depreciated, and that our standard of value is in consequence more stable than we should have beforehand imagined it to be. M. Leon Faucher estimated that in 1851 the American production of silver was £7,680,000 or nearly 1½ millions more than in 1848. In 1857 Mr. Newmarch considered the American produce of silver to be 10 millions sterling per annum, and the total silver produce of the world at not less than 12 millions per annum, or nearly double the amount produced in 1848. The estimated imports of Silver into the United Kingdom rose from £4,200,000 in 1856, and there has been a large consumption for coin and other purposes in the United States. The large supplies of quicksilver from California since 1855 have already reduced the price of that metal more than one half, and thereby rendered it profitable to re-open silver-mines previously abandoned, and to extend the production of silver-mines actually in operation.

The imports of Silver into the United Kingdom from the places of production, exclusive of coin and bullion received from the Continent, were as follows:—

1851	•		£ 5,580,000 1855			5,720,000
1852	•	•	6,750,000 1856	•	•	7,590,000
1858	•	•	5,960,000 1858	•	•	8,000,000
1854			6.060.000 1859		_	8 ann ann

Export of Silver from Southampton to India, China, and the Straits,

Year.	India.	China.	Straits.	Total
1854 1865 1856 1857 1868 1859	£. 428,230 4,788,909 8,381,505 11,878,017 8,965,835 11,163,384	£, 2,783,440 1,376,773 2,166,514 4,479,315 1,355,117 3,374,250	£. 316,061 566,972 874,583 102,981 290,887	£. 8,185,670 6,431,743 12,113,991 16,731,915 4,753,933 14,828,524*

[•] Including Government Remittances, about £6,173,124.

The following is a statement	of the a	mount of bullion purchased	and sold by.
the Bank of England, distingt	ishing go	old from silver, &c. —	
1840.	£214,394	Bar gold sold	. 296,356 804,330
Bar gold purchased	75,097	Total .	2,100,586
Foreign coin Total	289,491	Excess of payments of coin .	. 6,005,244
Bar gold sold	281,112	Excess of receipts Received from the Mint	. 1,869,553 . 5,228,407
Foreign coin sold	217,176	1848.	
Total British gold coin—	498,288	Bar gold purchased Foreign coin purchased	, 4,477,388 , 1.320,650
Excess of payments to the public	2,178,000	Total .	5,796,038
Excess of receipts	2,111,000	Bar gold sold	30,942
Bar gold purchased .	1,191,008	Foreign coin sold .	1,748,647
Foreign coin purchased .	89,714	Total . Excess of payments of coin	. 1,779,589 . 8,606,289
Total	1,280,722 1,793	Excess of receipts	2,927,573.
Excess of payments to public Excess of receipts	1,950,000	Received from the Mint	2,313,000
Excess of receipts	2,410,855 851,145	1849. Bar gold purchased .	8,024,799
Received from the Mint	· 1	Foreign coin purchased .	621,859
Bar gold purchased	2,634,032	Total	3,64 6, 658 .
Foreign coin purchased .	197,854 2,831,086	Bar gold sold Foreign coin sold	29,924
Bar gold sold	3,388	Total .	. 86,847 . 116,771
Excess of payments	8,962,429	Excess of payments	2,994,980
Excess of receipts Receipts from the Mint	2,763,000 1,829	Excess of receipts .	. 1,661,051
18 43.		Received from the Mint . 1850.	. 2,218,046
Bar gold purchased	4,277,441 240,832	Bar gold purchased .	. 2,549,837
Total	4,518,278	Foreign coin purchased .	. 388,386
Bar gold sold	1.368	Total	2,938,223
Foreign coin sold	2,712	Bar gold sold	228,889 507,064
Total	4,080	Total	735,953
Excess of payments Excess of receipts	2,895,050 8,013,165	Excess of payments of coin	8,955,466
Received from the Mint	1,668,885	Excess of receipts	. 114,355 . 1,421,762
1844.	8,739,971	1851.	
Bar gold purchased	24,706	Bar gold purchased Foreign coin purchased .	. 5,182,280 . 917,304
Total .	3,764,677	Total .	7,099,584
Bar gold sold	11,220 4,272,265	Bar gold sold	159,266
Excess of receipts	1,194,401	Foreign coin sold .	. 157,057
Received from the Mint	1,832,061	Total Excess of payments of coin	- 307,323
1845. Bar gold purchased	2,412,071	Excess of receipts	. 4,650,280 . 17,705
Foreign coin purchased	1,376,058	Received from the Mint .	. 17,705
Total .	3,788,124	Total	. 4,540,212
Bar gold sold	13,858 1,550	Bar gold purchased .	. 13,167,670
Foreign coin sold	15,408	Foreign coin purchased .	2,183,101
Excess of payment of gold coin .	5,806,397	Total .	15,350,771
Excess of receipts	142,949	Bar gold sold Foreign coin sold	. 75,801 . 1,301,904
Received from the Mint 1846.	4,300,227	Total	1,377,705
Bar gold purchased	3,262,406	Excess of payments of gold coin Received from the Mint	1,716,589
Foreign coin purchased	1,269,713	1853.	. 8,755,600
Total Bar gold sold	42,472	Gold received	. 19,219,475
Foreign coin sold	109,556	Gold delivered	. 14,057,354
Total	152,028	Gold received	. 15,523,374
Excess of payment of coin Excess of receipts	4,505,416 676,288	Gold delivered . 1855.	. 12,192,202
Received from the Mint	4,403,536	Gold received .	. 17,296,808
1847.		Gold delivered	. 12,362,884
Bar gold purchased	2,528,875 2,336,278	Gold purchased Gold sold .	. 8,310,358. 3,391,981
Total .	4,865,153	, 	alan, thaat
•		•	

The gold bullion purchased and sold by the Bank of England in the last ave years has been as follows:—

	Bullion Purchased.	Builton Sold.	Gold Coin Received from the Mint.
1855	£ 8,810,858	₫ 2,391,981	4,008,823
1856 1857	7,070,831 8,870,296	1,967,680 8,024,894	6,002,350 4,859,561
1858 1859	10,823,986 8,550,608	2,712,196 2,814,177	880,500 2,999,410
	88,626,061	18,910,878	23,750,544

Silver bought and sold by the Bank of England :-

	Purchased.	Sold.	1	Purchased.	Solđ.
1840	£419.509	£679,661	1850	£	\$183,826
1841	•••		1851	• •	
1842	951,400	154,701	1852	2,500	16,952
1848	1,999,370	229,842	1853	5,346,588	5,870,159
1844	108,768	400,455	1854	5,162,646	5,160,591
1845	788,967	748,388	1855	4.713.668	4,718,028
1846	1,245,182	849,162	1856	478,291	
1847	409,134	1,513,605	1857	897.441	••
1848	604,306	1.547.018	1858	400.024	•••
1849	001,000	186,628			•••

The total imports of silver into France during the three years, 1853-4-5, were £13,332,000, and the exports were no less than £32,440,000, indicating a balance in favour of exports over imports of silver of £19,108,000. During the same period the aggregate imports of gold into France were £47,216,000 and the total exports £10,272,000, showing a balance on the side of imports over exports of gold of £36,944,000. The gold sent into France, it will be noticed, exceeds greatly in value the silver drawn from it. Part of this excess is probably due to the French transit trade in the precious metal, whilst part is very likely hoarded in the provinces. It is evident from a general comparison of these figures that, under the influence of the Eastern demand for silver, the stock of this metal, circulating in France and in other continental countries, is being gradually withdrawn and replaced by gold.

drawn and replaced by gold.

The Custom House Returns from 1834 to 1857 show that £94,517,189 of treasure (silver bullion and coin) had been received in India, and of that sum only £18,162,794 was re-exported, leaving a balance in India of £76,354,395; and of this sum no less than £66,224,173 passed through the Mints of Calcutta, Madras and Bombay, and was converted into Company's rupees. It is asserted by many that the silver is hoarded, but the owners would scarcely have paid seigniorage, and had the silver melted and converted into rupees for the sake of hoarding; and it is more than probable that it was required to pay for the annual enormously-increased production of indigo, sugar, oil seeds, lac dye, &c., improving, therefore, the means of the caltivators. If the period between 1800 and 1835 be taken into consideration, the probability is, that about £150,000,000 sterling of silver have remained in India, realizing, even at this day, the assertion of Pliny, that India is the sink of the precious metals. There has been an aggregate shipment of upwards of 72½ million pounds value of specie in the last nine years, (1851-59), or an average of £8,000,000 per annum; of which about 7½ millions was silver and only half a million gold. This heavy drain serves not only to keep up the price and demand for silver, but also diminishes the quantity available for small coinage for circulation here. It is rendered necessary, however, to compensate the wear and tear of 4 per cent. on the silver in circulation in India, (calculated to amount to £400,000,000) and to meet the balance of trade with China, where silver is also the circulating medium.

Computed real value of the Imports and Exports of Bullion and Specie.

	IMP	IMPORTS. EXPORTS.						
	GOLD. &.	SILVED &.		eold. L.	SILVER &	TOTAL		
1844	8,760,000	110,000	1844	247,124	8,432,257	8,679,861		
1845	8,730,000	740,000	1845	224,728	8,849,158	4,066,886		
1846	4,530,000	1,240,000	1846	582,859	2.40 L407	2,937,266		
1847	4,880,000	410,000	1847	4.784.152	8.818.445	8,602,507		
1848	5,790,000	600,000	1848	1,555,396	7.041.594	8,596,990		
1849	8,640,000	1 .:	1849	1,190,934	7.721.543	8,919,467		
1850	2,940,000	1	1850	2,574,568	4,365,778	6,910,346		
1851	11,500,000	5,600,000	1851	8,975,864	5,084,187	9,059,551		
1852	15,500,000	7,000,000	1852	4,825,824	5,969,640	10,295,464		
1853	21,000,000	7,500,000	1858	12,751,778	6.154.975	18,906,753		
1854	19,800,000	6,500,000	1854	16,552,845	6.033,728	22,586,568		
1855	17,800,000	6,600,000	1855	11,847,218	6,980,965	18,828,178		
1856	7,070,000	7,600,000	1856	12,038,299	12,813,498	24,851,797		
1857		1	1857	15,061,500	18,505,468	33,566,968		
1858	22,793,126	6,700,064	1858	12,567,040	7,061,836	19,628,876		
1859	22,297,668	14,772,456	1859	18,081,139	17,607,664	35,668,603		

The imports of bullion were not officially registered at the Custom House under the Act 20 & 21 Vict. c. 62, before Nov. 1857, and therefore the figures for previous years can only be regarded as an approximate estimate. The years 1844 to 1850 and 1856 show the quantities purchased by the Bank of England only. Messrs. Pixley. Abell and Langley, bullion brokers of Old Broad Street, state the arrivals of Australian gold in this country at the following amounts:—

1857	•	•	•	. 2,542,718 Ounces.
1858	•	•	•	. 2,431,277 ,,
1859				. 2.457.786

BUTTER. The following official returns show the quantities of butter entered for home consumption into the United Kingdom:—

			MPORTED	FROM			
TRABS.	Hanse Towns.	Holland.	Belgium.	France.	Channel Islands.	Other Countries.	Total
	Cwts.	Cwts.	Cwta	Cwts.	Cwts	Cwts.	Cwts.
1848 -	50,916	194,118	14,588	738	68	27,723	288,144
1849 -	87,228	201,059	21,688	204	14	19,287	279,465
1850 -	46,999	225,174	18,446	596	114	29,229	820,560
1851 -	54,262	284,502	17,942	8,982	405	88,792	844,185
1852 -	49,920	211,452	16,828	1,668	44	7,996	267.908
1853* -	69.748	239,557	25,700	81.862	2,406	28,636	397,911
1854 -	82,694	968,747	55,090	46,064	7,395	28,821	478,811
1855 -	90,419	260,145	\$1,647	21,790	8,495	20,773	448,268
1856 -	87.227	276,111	63,204	82,096	12,154	27,586	496,378
1857 -	58,014	255,367	62,409	24,828	28,448	18,946	448,012
1858 -	48,048	201,402	58,970	28,631	89,964	18,740	385,050
1859 -	54,065	214,844	60,952	36,732	41,819	18,122	421,534

Amount of Customs Duties Received

YBARA.	Hanse	1	1		Channel	Other	Total.
YBARS.	Towns.	Holland.	Belgium.	France.	Islands.	Countries.	
	£	2	£.	6	4	€.	
1848 -	25,458	97,057	7,298	869	84	10,485	140,701
1849 -	18,613	100,530	10,828	147	7	8,280	138 405
1850 -	23,500	112,587	9,240	299	57	12,687	158,370
1851 -	27,131	117,251	8,649	1,991	903	19,193	167,418
1852 -	54,961	105,726	8,424	831	23	8,610	143,574
1855* -	24,497	81,778	8,770	8,525	645	7,543	131,756
1854 -	20,690	65,949	13,773	11,516	1,849	5,926	119,703
1855 -	22,609	65,037	12.911	5,448	874	5,096	111.977
1856 -	21,807	69,028	15,801	8,024	8,039	6,759	124,458
1857 -	14,504	68,843	15,602	6,207	7,112	8,395	110,593
1858 -	12,011	50,351	18,317	7,159	9,991	2,660	95,489
1859 -	18,517	58,711	15,288	9,184	10,465	2,482	104,587

^{*} The Duty on Foreign Butter was reduced, on 4th June, 1853, from 10s to 5s per cwt, and in March, 1860, was abolished altogether.

CACAO. In 1853 the duty on Cocoa was reduced to 1d. per pound, and on cocoa paste or chocolate to 2d. The imports average 6,000,000 to 7,000,000 lbs. of which about one half are entered for home consumption. Cocoa, except for ship's use in the navy, is not a very popular beverage in this country, and does not make the progress in consumption which tea and coffee have done. The imports in 1858 were unusually large, amounting to 10,338,404 lbs., of which 4,413,145 lbs. came from Trinidad, and Grenada, &c., and 3,849,230 lbs. from Ecuador. The quantity taken for consumption in 1858 was 3,071,115 lbs., and in 1859, 3,480,987 lbs. The average value is about 6d. per pound. The chocolate imported in 1858 amounted to 36,064 lbs. of which the greater portion was taken for consumption, and even 8,651 cwt. of husks and shells were imported, being used as a flavouring beverage by the Irish and lower classes generally, as well as for mixing. The value of this refuse is 17s. 3J. per cwt.

for mixing. The value of this refuse is 17s. 3J. per cwt.

CALIFORNIA. An important Pacific State on the North-west coast of America, belonging to the United States, which has risen into great importance from its extensive and productive gold fields. It comprises an area of 155,980 square miles, and has many important towns, the principal being the sea port of San Francisco. The State is divided into 43 counties, of which 20 may be classed as agricultural and grazing, 13 as mining, and the remainder as mixed mining and agricultural. The ports of entry in the State, besides San Francisco, are Stockton (on a branch of the San Joaquin river), Sacramento (on a river of the same name), Benicia, in Suisun Bay, Montery, San Pedro, and San Diego, to the south of this; but the trade with all these ports, except San Francisco, is strictly coasting. The Sacramento, Feather and San Joaquin rivers are navigated constantly by steam-vessels. The Sacramento empties into Suisun Bay about 37 miles from San Francisco, and is navigable by steamers for 370 miles. The Feather is a branch of the Sacramento, and is navigable but to light draught steamers only for about 60 miles. The San Joaquin flows into Suisun Bay, and is navigable for about 100 miles.

The startling discovery of the vast metallic and mineral wealth of California, attracted to her shores in the space of twelve months, in 1849, more than 100,000 people, 80,000 of whom were Americans, and an extensive commerce has since sprung up at San Francisco with China, the ports of Mexico on the

Pacific, Chili, the islands in the Pacific and Australia.

California became as if by magic a State of great wealth, and commercial importance. It was at first thought that the tide of immigration would keep up at the large ratie of 100,000 per annum, but this has not proved to be the case, the State progresses now somewhat slower in population, the departures almost balancing the arrivals, and the annual increase by immigration scarcely exceeds 30,000. The population might indeed have been very largely swelled by the Chinese immigrants, who arrived in considerable numbers, but their reception was strongly opposed, and they have been much ill-treated; there seems also no probability of the prejudice against them being removed. In June, 1847, the Californian Star, the first newspaper published in the district, gave a return of the population of the village of San Francisco, as 459 souls, 321 males and 138 females, of these 375 were whites and the rest Indians and negroes; now the city has covered the sand beach, mounted the hills, overflowed into the valleys beyond, encroached upon the waters, and promises ere long at the ratio of increase to cover the peninsula between the ocean and the bay. The first brick building in San Francisco was erected in Sept. 1848, and there was then but one other such building at Monterey. There are now in the city (although it has suffered severely on several occasions from fire) 18 or 20 churches and 700 brick houses mostly of two, three and four stories high, generally fireproof, some few are five or six stories high. The mining population numbered about 100,000 in 1858, and they earned about 8s. per man per day on the average, the rates of wages for miners being 6s. to 14s. per day.

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Notwithstanding the changes which are yearly taking place a large proportion of the wealth of the country still consists of its gold mines, which judging by

the exports yield as largely as ever. The shipments according to the manifests at the Custom House for the last six years have been as follows :-

1853	•	-	-	-	_	£10,981,000 1856	-	•	•	•	- 4	10,197,752
1854	•	-	•	•	•	10,400,000 1857	-	-	-			9,868,087
1855	•	-	•	-	_	8.923.830 1859					_	9,490,460

In former years there was doubtless a far larger amount taken from the country by individuals which did not pass through the Castom House books than there is now. In 1854 the United States Branch Mint was established at San

In 1857 the taxable property in the State was assessed at £26,361,254. This value was exclusive of mines, which are not taxed. There is a large amount of European capital invested in the country, yielding on an average 20 per cent. per annum, of this about £300,000 belong to non-resident English. The value of merchandise passing through British hands may be estimated at about £250,000. In 1858 there were 279 quarts mills in operation throughout the mining districts for crushing ore; of these 119 were worked by steam, 153 by water, and 7 by mule and horse power, with an aggregate of 2,610 stamps. It was also estimated that there were more than 6000 miles of artificial water-courses, constructed at a cost of upwards of £2,500,000, built by the owners themselves, this outlay being the supposed worth of their labour. There is yet a vast field for capital in this branch of enterprise, some counties having scarcely any artificial supply of water, which is essential in washing out the gold.

The number of saw mills in the State is 388, of which 128 are propelled by steam, and 200 by water, and their aggregate capacity is about 500,000,000 feet (board measure) per year ; a large timber trade has sprung up between Australia and the Pacific coast.

The value of the exports from California, exclusive of coin and bullion, have risen from £978,651 in value in 1854, to £15,039,247 in 1858. A. Forbes in his work on California gave the population of the country for 1831 at 18,700 Indians, and 5000 white and free settlers of all classes, and the livestock at 216,627 horned stock, 155,455 sheep, 32,201 horses, 2,844 mules, and

The population of California in 1850 was, according to the census, about 92,000, of whom 69,610 were Americans, and 22,358 foreigners. The live-stock then comprised 21,719 horses, 1,666 asses and mules, 4,280 milch cows, 258,379 working cattle and oxen; 17,570 sheep, and 2,776 hogs. Another census, taken in 1852, represented the population at 264,436. The live-stock then was stated at 64,773 horses, 16,578 mules, 104,339 cows, 315,392 beef cattle, and 29,065 working oxen. The population of the State of California on the 31st Dec. 1853, was estimated at 328,000 souls—composed as follows: Americans, 215,000; Germans, 25,000; of Spanish blood, 20,000; Chinese, 15,000; miscellaneous foreigners, 5,000; Indians, 20,000; and negroes, 2,500; of these about 65,000 were women and, perhaps, 30,000 children. In 1858 it consisted of about 15,000 French, 15,000 British, 30,000 Chinese, besides a large number of Germans and other foreigners. The population of the city of San Francisco is now about 60,000. The number of vessels which entered the port in 1853, coasting and foreign, was 1028, measuring 558,755 tons, and the clearances were 1658 ships of 640,075 The value of the goods imported was £7,000,000 or £20 per head of the population. The export of gold however amounted to £12,000,000 or £34 per head, exclusive of quicksilver and other produce. The tomage (steam and sail) owned in San Francisco amounted to 63,428 tons, and in other parts of the State steamers registering 23,566 tons. The freights paid at the port of San Francisco for the year 1853 amounted to £351,000, and the custom duties to £489,688, but in 1857 the custom duties were only £301,404. The arrivals of passengers by see here here as follows: in 1852, 35, 185 in 1853, 5, 1,359, and of passengers by sea have been as follows: in 1852, 35, 185, in 1853, 51,359, and in 1854, 47,730, in 1858, 40,789. In 1852 990 ships of 444,515 tons entered the

port, in 1858 926 ships of 260,956 tons, and in 1854 617 of 407,485 tons. A large portion of the passenger traffic is carried on by steamers from the Isthmus. The total number of passengers who crossed the Isthmus of Panama in 1853, was 32,111 and 30,108 in 1854. While the average passage by sailing vessel round Cape Horn from New York to San Francisco is 108 days, by way of Panama, the passage is made in less than half that time. Previous to the emigration of the last few years, the population of Oregon, did not exceed 1000 inhabitants, exclusive of the Hudson's Bay Company's employees, at present it may be estimated at least at 50,000. Some 20 or more saw mills and several flour mills are now actively employed in preparing lumber and meal for home use and importation. The trade with San Francisco keeps 20 vessels of about 4000 tons fully occupied, and there is a semi-monthly line of mail steamers running. There are now 43 river steamers plying to and from San Francisco, and the upper towns of the State.

In the official year ending June 30, 1858, the entries of vessels at San Francisco numbered 255, registering 148,546 tons; 17 vessels measuring 240 tons were built in the State in the same year. There were registered, licensed and enrolled, at San Francisco Custom House in 1858, the following vessels,

over 20 tons burden :-

				Tons.						Tons.
24 ocean steamers		•	•	. 25,130	40 brigs					7,166
43 river steamers	٠	•	•	9,096	190 schooners	•	•		•	12,943
26 ships	٠	•	•		68 sloops	•			•	2,334
58 barques .	•	•		. 16,049	In all	449 v	CE	sels		84.461

Every year additional attention is turned to the raising of sheep and cattle. In 1858 the number of sheep was stated at 650,000, cattle 814,642, horses 160,800, mules 20,500, and pigs 151,000. The growth of the grape vine is occupying considerable attention; in 1858 nearly 4,000,000 vines were in cultiva tion, 186,200 acres were under culture with wheat, producing about 3,563,000 bushels, 236,500 acres with barley, producing 5,410,000 bushels, 48,700 with oats, produce 1,386,000; 13,200 with Indian corn, yield 630,000 bushels; 15,888

with potatoes, produce 1,465,239 bushels, besides pulse, hay, &c.
One of the influences of Gold in California has been to plant a powerful and thriving commercial State on the Atlantic, destined to work a singular revolution among the sluggish States of the Eastern Archipelago and Asia. Already it has drawn thousands of plodding and thrifty Chinese to its shores. Already it has opened up a trade with the hitherto sealed empire of Japan; it has dotted the Pacific with ships, and given life and energy to the people of the Sandwich Island group. It has drawn an overland traffic across the vast prairies, steppe and mountains of the heretofore untraversed Continent. It has vastly stimulated trade with Peru, Chili, New Granada, Nicaragua, and other republican States. It has led to the construction of a railway across the isthmus of Panama uniting the increased commerce of the two oceans. It has opened up to steam navigation the rivers and lakes of Nicaragua, Oregon, and Upper California; thousands of steamboats will soon cut the billows in all directions, eastwards and westwards, freighted with wealth and produce. Day by day steadier and safer channels of communication are being opened up with the Atlantic ports, with the United Kingdom, with Europe and the world at large, and railroads with their accompanying telegraphs will ere many more years have elapsed extend across the entire American Continent, and the Australian continent; and the two isthmuses will be hourly travelled by rail, if they are not severed by water.

There is already one railway in California 22 miles in length, running from Sacramento to the foot of the Sierra Nevada Hills, which cost £240,000. In 1857 there were 82,452 passengers passed over it, and its receipts from that source amounted to £25,283, and from freight to £10,285, while its current expenses were £18,266. It is intended to continue the line to Marysville, a distance of 42 miles. The estimated cost of this extension amounts to £290,000. There are two telegraph lines running from the city of San Francisco to the

mines. One is 210 and the other 350 miles in length. In the State there are 8 or 10 large foundries engaged in making and repairing machinery.

The establishment of mail lines across the Continent by the American govern-

ment will have a tendency to attract the attention and draw the people of the Western States to the Pacific side, especially as the routes are to have military

protection.

CANADA was formerly composed of two provinces, the upper and lower, now known as the eastern and western, and consolidated into one. This province extends in length from the coast of Labrador to the western extremity of Lake Superior. 16,000 miles, with an average breadth of 230 miles, being nearly three times as large as Great Britain and Ireland. It contains an area of about 350,000 square miles, diversified with broad lakes, gigantic rivers, fertile farms, dense forests, smiling villages, and large cities. Its population at the present time is not far from three millions of inhabitants. In western Canada the soil is unequalled for its fertility. In the year 1851 the wheat crop in Upper Canada was 12,682,550 bushels. In the last ten years the growth of wheat in the whole of the United States increased 48 per cent., and that of Canada in the same period increased 400 per cent. In Indian corn, the increase in the States for ten years was 56 per cent., and in Canada 163 per cent. Of oats, the increase in the same length of time has been in Upper Canada 133 per cent., against 17 per cent. in the United States. The increase in cattle, sheep and horses, has been in about the same ratio. From facts taken from the last census reports of Canada and the United States, (taken within a year of each other) it appears that Canada far exceeds the most productive State in the Union in wheat, peas, rye, barley, oats, hay, buckwheat, hemp, flax, hops, maple sugar, and potatoes.

It is not, however, in agriculture that this colony alone excels, but the pro-

ducts of the forest are immense, and nothing has served to open up and develop the tracts of timber lands in Canada so much as the Grand Trunk Railroad of which 1100 miles are now open. Upon the line of the road between Portland and Montreal immense saw mills have been erected, and vast amounts of lumber have been manufactured and sent to various markets, making Portland the shipping port for this trade. One mill alone paid the Grand Trunk road in 1859 the enormous amount of 60,000 dollars for freight; this is but the one in-

stance of many.

From the Report of the Commissioners of Crown Lands for 1856, we take the following statistics :-

GENERAL TERRITORIAL SUMMARY OF UPPER CANADA.

Vacant Crown Land surveyed Do. Clergy Lands, do.	:	-	=	:	-	:	-	4,797,550 487,6834	Acres
Total of disposable Public Lands Township Lands hitherto aliens	s, Seig	niori	es ex	cepted	đo.		-	5,285,283 <u>1</u> 6,373,597)1 11
Total hitherto surveyed in Town Extent of Seigniories	nships	-	2	:	:	-	-	11,500,000	n n
Total organized Unsurveyed Crown Lands -	:	:	:	:	-	:	:	22,387,761 112,075,029	19
Total area of Lower Canada -	-	-		-		-		184,412,800	Acres

The area of Lower Canada here given is only an approximation of its smallest probable extent, its northern boundary being but imperfectly known and undetermined.

GENERAL TERRITORIAL SUMMARY OF LOWER CANADA.

Vacant	Survey	ed Cro	wn L	ınds	-	-	•	•	•	-	•	830,3981	Acres
Do	ďo		gy La		-	-	•	-	•	-	-	422,944	**
Do	do	Scho	ol La	nds	-	-	-	•	-	•	-	193,643	99
Total	of disp	eable	Public	SULT	reyed	i land	s -	-	-	_	-	1,446,9861	27
Private	Lands	-	-	•	-	-	-	•	-	-	-	19,888,997	"
Total	of surv	eyed L	ands			•	•	-	-		-	20,885,984	**

Unsurveyed Waste Lands of the Crown - - - 56,770,416 Acres-

Total area of Upper Canada within the water shed of the St. Lawrence and Lakes - - - - - - - - 77,606,400 Acres.

In Lower Canada there are now over 5,000,000 acres of Crown Lands saleable. During the year 1858 nearly 50,000 acres were sold for 22,249 dollars; something less than an average of half a dollar an acre. In Upper Canada, the sales of Crown Lands reached 121,608 acres, the purchase money amounting to 138,693 dollars. Of the Clergy reserves there remain in Lower Canada 482,464 acres, and in Upper Canada 337,195. Of this description of lands there were sold during the year 4,116 acres in Lower Canada, and 25,812 in Upper Canada Of the million of acres set apart in Upper Canada some years ago for common schools, only about 25,000 acres remain unsold.

In 1851 the gross amount of wheat grown was 16,202,272 bushels, showing an increase of 400 per cent. during the 10 previous years, while, in the United States, the increase had only reached 48 per cent. In oats the produce increased 70 per cent., while that of the States was only 17 per cent. Even in Indian corn Canada compares favourably with the States, her increased production being equal to 163 per cent., while that of the States was only 56 per cent. But perhaps these points would be best understood by comparing them with those of a separate State of the Union, which should be a fair representative of its productive condition. Ohio has been selected for the comparison, and those who know that State will acknowledge that Canada has chosen no mean competitor. The land in Ohio is valued at nearly double that of the average of the Union, and has more than three times as many inhabitants to the square mile, having 49.55, while the average of the Union, is only 15.75. Let us look at some of the principal items.

CANADA	IN OHIO.				
Population	•	-		- 1,842,265	1,980,427
Acres occupied, cultivated	-	-	-	- 7,800,889	9,851,439
,, uncultivated -	•	-	-	- 10,638,957	8,146,000
Total occupied	-	-	-	- 17,939,796	17,997,493
Acres occupied to each inhabitant		-	-	- 984	9 0 18
Acres of Wheat	-	-	-	- 1,136,811	1,231,437
Produce in bushels	-	-	-	- 16,155,946	14,487,851
Bushels per acre	-	-	-	- 14-3	.]2
Bushels per inhabitant	-		-	- 89	73
Assessed value of occupied Lands	_	_	_	- £65,879,048	£89.689.651
Oats, produce in bushels	_	_	_	- 21,434,840	18,479,749
D - 1	_	_	-	- 1,389,499	854,358
D	_		_	- 869.835	425,718
	-	•	_	- 4,223,487	55.168
	-	•	•		
Cows	-	-	-	- 591,438	544,499
Horses	-	-	-	- 885,877	463,897
Sheep	-	-	-	- 1,597,843	8,942,929
Cattle	-	-	-	- 74,106	814,448

These were the statistics of 1851, since then the country has been advancing at even a more rapid rate. In 1851 the gross wheat produce amounted to 16,155,956 bushels, in 1856 to 26,555,684 which is equal to 64.3 per cent. in the 5 years, and raises the return from 8.9 bushels to 10.6 bushels per head of population. In barley and rye the returns are even more satisfactory, the surplus produce of 1855 being 566,534 bushels, while that of 1856 was 989,447, showing an increase of 74.5 per cent. in one year. In Indian corn an increased ratio of increase is seen, the exports of 1855 being 73,066 bushels, those of 1856 being 164,495, the increase amounted to 125 per cent., but even this is exceeded by that of oats, which present an increase of 250 per cent. in one year, the quantity exported in 1855 being 370,275 bushels, while, in 1856, it amounted to 1,296,677 bushels. The ratio of increase in the productions of the field appears to increase with that of the population; the latter, however, presents some remarkable features. In 1763, the population of Canada was given at 82,000; 1814, 430,000; 1823,

575,000; 1831, 772,000; 1844, 1,199,000; 1848, 1,491,000; 1851, 1,842,265; 1856, 2,500,000. If we compare these returns with those of the States and also of this country, say for the last decennial census, we can form some idea of the relative population progress of Canada. In Great Britain the increase amounted to 18:2 per cent.; in the United States to 35 per cent., while the population of Canada increased 69 per cent., or if we were to take the western province alone we should find an increase of no less than 104 per cent. in the ten years.

The value of the imports into Canada were, in

1841	-	-	-	_	-	-	-	-	-	_	£2,694,161 5,358,697
1851	-	-	-	-	-	-	-	-	•	-	5,358,697
1856	_	_	_	_	-	_	_	_	_	_	10 898 098

Thus, while the export trade since 1851 shows an increase of, in round numbers, 150 per cent., the imports have fully doubled themselves in the same period.

If we take the present productive returns of the cultivated lands as a basis for our calculation, it will be seen that the already occupied land in the colony would support a population of about 10,000,000 inhabitants, and if the present progressive rate of increase is sustained, at the close of the present century we may expect to see Canada occupied by a population something like 20,000,000 in number. Whatever her numbers may be, it is quite certain that for years to come the great strength of the country will lie in the productions of her soil. With these she will pay for our manufactures; her surplus will supply our wants and our surplus will administer to her necessities and comforts, and the scales of commercial benefit he kent pretty evenly balanced.

canada, and particularly Western Canada, is essentially an agricultural country. Three-fourths of her people are engaged in agriculture, and the other fourth is mainly dependent upon these. The facilities afforded to the agricultural estate in the country, an amount almost incredible. In many parts of the province land has risen from 6 to 40 dollars per acre. The total number of miles of railways in the colony is now over 2000, and the increased value of real estate from this cause alone is estimated at over £30,000,000. There are already in operation the following lines:—

Buffalo, Brantford and soderic	h 160 miles.	Montreal and Lachine -	- 8 miles
Cobourg and Peterboro -	- 98	Montreal and New York -	- 6a
Champlain and St. Lawrence	- 44	Ontario, Simcoe and Huron	
Erie and Ontario	- 90 -	044 3 D44	
Great Western	- 857	Port Hope and Lindsay	- 42
	- 1092	Port Dalhousie and Thorold	- 5
London and Port Stanley -	- 26		
		Total running .	. 1992 miles.

In addition there are the following lines now constructing:—
Grand Trunk. extension. 20 miles. Brockville and Ottawa - 75
Port Dalhousie and Thorold, extension - 20 Total forming - 115 mi

tension - 20 Total forming - - 115 miles.

When these roads are in full running order, their cost will have summed up to nearly £20,000,000. The weekly expense of keeping them running will be £20,000 per week, or £1,040,000 per annum—and the annual interest on the capital invested, £1,200,000.

The following is a comparative statement of imports, exhibiting in contrast the value of, and amounts of duties collected on, goods entered for consumption during the years 1853, 1854, 1855, and 1856, respectively:

WHERCE		VAL	72.		Durr.						
IMPORTED.	1858.	1854	1855.	1856.	1858.	1854.	1885.	1856.			
Great Britain	£	£ 5.740.889	£ 8,825,865	£,	E	2	å	£			
N. Am. Colonies West Indies	158,164 869	168,778		258,149	l i	1,224,751	881,445	1,197,290			
United States . Other Countries	2,945,536 268,507		5,207,169 268,477				·				
Total	7,995,359	10,132,331	9,021,542	14,896,096	1,028,676	1,224,751	881,445	1,127,220			

CAN

Comparative Statement of the Exports of Canada, from 1851 to 1857 in Currency.

	1851.	1852.	1858.	1854.	1855.	1856.	1857.
	£.	£,	£.	£.	£	£.	£.
Produce of the Mine	21,680		27,339		81,458		
Do Sea	62,824	74, 462	85,000	87,428	114,980	114,086	135,028
Do Forest .	1,515,879	1,644,585	2,355,255	2,495,342	1,986,980	2,504,970	2,932,596
Animals and their produce .	219,859	295,929	842,632	208,318	898, 796	641,014	520,809
Vegetable Food	941.872	1, 57,065	1,995,095	I.822,826	1		0 000 500
Other Agricultural products .	9,507	27,847	26,619	17,936	8,257,599	9,139,000	3,320,700
Manufactures	15,528				119,019	98,407	99,705
Other Articles	37.972		15,824				
			<u> </u>				
P	2,824,630	3.251.393	4.882.870	4.760.264	5,925,975	7.148.759	6,016,743
Add val. of ships built at Quebec	416,550			552,063	304.586		
Add 20 per ct. to Inland Ports .	211,470		447,268				
Grand Total of Exports .	3,452,651	3,826,901	5,950,325	5 754,797	7,047,115	8,011,754	6,751,656

The extent and comparative state of the exporting and importing trade of the Province is exhibited by the following details, which show the exports of produce and imports of foreign merchandize, with the total amount of duties collected for the last four years:—

	Exporta.	Imports.	Duty.
1858	23,472,609 dols.	29,078,537 dols.	8,381,339 dola.
1857	27,006,627	89,430,598	8,925,051
1856	82,047,017	43,584,887	4.508.882
1855	28, 188, 461	86,086,169	8.595.782

Notwithstanding the large decrease in the trade, as above exhibited, the exports more nearly equal the imports in 1858 than for the previous years, shown as follows:

Imports Exports	1858. 29,078,587 dols. 23,472,609	1857. 89,430,598 dols. 27,006,627	1856. 43,584,387 dols. 82,047,017
Difference	5,605,928 dols.	12.423.971 dols.	11.587.870 dols.

The following figures exhibit the consumption of the principal articles of necessity in the entire Province for three years:

	1856.	1857.	1856.
Muscovado sugar, Ibs	- 83,862,902	25,061,095	27,899,005
Tea, lbs	- 6,714,867	8.791.760	6,015,981
Coffee, do	- 1,897,388	1,374,121	1,778,835
Tobacco, do	- 8,053,869	2,926,185	8,294,154
Cottons, value, dollars	- 5,028,985	4,796,046	8,315,119
Linens, do	- 400,880	884,985	138,110
Silks, do	- 1,162,076	1,025,839	658,045
Woollens, do	- 4,823,172	8,907,789	2,658,515
Leather manuf. do	- 416,777	514,493	447,346

Turning to the exports, we find the following to be the principal articles sent out of the Province in the past three years:—

Wheat, value Flour Barley and Rye, value Oats, value Products of the Forest	1856.	1857.	1858.
	- 6,977,843 dols.	2,789,975 dois.	2,855,096 dols.
	- 6,009,869	4,537,642	8,065,810
	- 907,281	684,056	1,015,635
	- 457,433	360,815	758,486
	- 10,016,883	11,730,357	9,447,727

The value of ships built at Quebec in 1858 was 743,640 dollars against 1,383,444 dollars in 1857.

The total exports from Canada were in-

				1855.	1856.	1857.
Products of Agriculture Products of the Forest	•			. £8,656,395 . 1,986,980	£4,884,083 2,504,970	£2,747,516 2,932,516
Other products		•	_	587.486	569,979	682 492

' It thu appears that the value of the agricultural produce exported from Canada

fell nearly one half between 1856 and 1857, owing to the fall in the price of wheat, from 10s and 11s per bushel to 4s 6d and 5s in the close of 1857 and 1858.

The exports of wheat and flour were respectively-

T	he	10	855 856 857 Ota	•	porta	tions		ere i	D Vá	du	:	Wheat Bushels. 8,193,748 4,997,656 2,762,654	•		Fic	643 878	Sarrels 1,936 1,775 1,949
1850 1851 1852	•			. :	4,2	87,000	ì	1858 1854 1855	•	•	:	8,105,865	1856 1857 1858	: .	•	• :	£8,717,000 7,88571 8 6,995,706

The year 1852 was a prosperous year; there was a good crop and fair prices; but importations were only £5,000,000. The five following years were years of wonderful expansion, not less than £16,000,000 of foreign capital was expended in the colony. There were immense crops and war prices. No wonder, then, that the importations were enormous.

				Total Value of Imports at Mon- treal during Thirteen Years.	Value of Exports from Montreal (inclusive of via Rouse's Point, St. Hyacinthe, and Coaticook) for Eleven Years.
1845				£2.614.911	
1846	•		•	2,303,906	£395.075
1847	_	-		2,063,490	408,017
1848	•			1,707,434	417,902
1849		•	_	1,637,409	439,005
1850	•	_	-	1,793,695	486,198
1851		•		2,294,710	529,807
1852	•		•	2,811,471	681,866
1853		,	_	8,503,697	913,757
1854	•		•	4,055,251	755,872
1855	_	•		8.093,145	704.129
1856	•		•	4,086,174	1.304.338
1857		•		4.212.135	2,000,000

GROSS AMOUNT OF DUTIES COLLECTED AT THE PORT OF MONTREAL FOR TWELVE YEARS.

1846				£137,519	1850				£258,474 1854				£478,361
1847				185,016					316,211 1855		•		310,061
1848	•		•	140,499	1852	•		•	838,269 1856	•		•	469,025
1849		•	•	191,888	1853		•		449,102 1857		•	•	461,790

ARRIVALS FROM SEA AT THE PORT OF MONTREAL FOR FOURTERN YEARS.

Years.		Ships.		Tons.	Years.			Ships.		Tons.
1843		106		36,631	1850			223		56,867
1844		182		48,186	1851	:		275		58,865
1845		202		51,295	1852		•	185		45,154
1846		221		55,868	1858	:		253		60,507
1847		221		63,308	1854			258		71.072
1848		164		42,157	1855			197		48,533
1849		150		87,793	1856			222		68,609

The financial agents for Canada, in London, Messrs. Baring and Co. and Messrs. Glyn and Co., made a very important communication to the Stock Exchange early in January, 1860, from the Provincial Government, relative to the consolidation of its then existing debts into one new 5 per cent. stock.

The total of the various liabilities of the Colony was stated to be £11,661,010, and the holders were presented with the option of converting them into one Consolidated 5 per Cent. Stock, irredeemable for twenty-five years. A portion of these liabilities consist of £700,000 to the English Government for the balance of a guaranteed loan; £400,000 to the current revenue for amounts of debt recently paid off; £250,000 for certain indemnity claims on the "Feudal Tenure Fund;" and £1,250,000 currency debt, making a total of £2,600,000, which it was contemplated to meet in cash. For that purpose an issue was made on the

London market, increased to £2,800,000, by a requirement of £200,000 for the public buildings at Ottawa, the new capital of the Colony. By this condensation of a number of securities, some of which are of an indirect character, into one sole stock, increased market-ability was obtained, and £69,000 in annual interest saved.

In 1857 the net revenue of the colony was £963,238, and the expenditure £1,073,093. Customs yielded £281,802., of the gross revenue, the territorial branch £104,386., and public works £102,307. The interest on the debt was £281,036.; civil government cost £58,512; the administration of justice, £126,552; legislation (the Council and Assembly), £126,434.; and education, £110,009. The total tonnage of ships entered at Canadian ports was 5,283,969, and the tonnage of ships cleared out 5,144,756: 110 sailing vessels, of 44,380 tons, and 16 steamers, of 2,556 tons, were built in Canada in the year 1857, while 152 sailing vessels and 28 steamers were registered. The value of the imports for consumption was £8,871,885, and that of the exports of domestic produce £6,076,491. The exports to the United Kingdom were £2,429,650., and to the United States £3,301,609. The articles exported from Canada included 2,562 tons of copper ore, 95,762 cwt. of dried fish, 21,880 barrels of potashes, 37,984 tons of elm timber, 48,539 tons of oak, 500,781 tons of white pine, 61,323 tons of red pine, 51,250 hundreds of standard deals, and 222,611m. feet of planks and boards, 5,482 horses, 10,871 oxen and bulls, 12,143 cows and calves, 10,276 swine, 14,626 cwt. of butter, 1,275,041lbs. of wool, 831,412 bushels of barley and rye, 866,860 of oats, 220,726 of peas, 2,762,454 of wheat, and 743,949 barrels of flour. The gross revenue received from the several canals in 1857 was £85,320. 1,595 vessels, of 223,206 tons, passed through the Canadian canals in 1857. 3,155,556 gallons of spirits were distilled, yielding a duty of £20,762.

8,155,550 gailons of spirits were useful at 1848, during which the protective policy existed, the total imports of Canada were £22,638,348; the total duty collected, £2,308,499; and the total free goods, £509,495. The averages being £2,829,793, £288,545, and £63,687; the duty being thus about 101 per cent.

and the free goods only 21 per cent. of the whole imports.

For the next period of six years to the passing of the reciprocity acts, and general adoption of more liberal views—1849 to 1854—the total imports, duty, and free goods, were respectively £29,429,934. £3,937,292. £2012,368. averaging £4904,988. £656,215, and £335,395 per annum; the duty being thus about 131 per cent., and the free goods nearly 7 per cent. of the total imports. For the last period of four years, from 1855 to 1858, the following results are shown:—Imports, £30,447,879; duty, £3,152,281; free goods, £8,868,250. The annual averages having been £7,611,970, £788,070, and £2,217,070; the duty being 101 per cent., and the free goods 29 per cent. of the imports. CANALS. In England and Wales there are altogether 112 canals, the

CANALS. In England and Wales there are altogether 112 canals, the total length of which, including their branches, amounts to 2574 miles, and the total cost has been £25,700,000. In Scotland there are 10 canals, in total length 225 miles, which cost nearly £2,500,000. In Ireland there are three canals, total length 276 miles, which cost upwards of £5,000,000. The entire cost of the 8074 miles of canals in Great Britain and Ireland has been £33,254,000., or about £11,000 per mile. The working stock of boats, horses, pumping-engines, hoists,

&c., has been estimated to exceed £3,000,000.

In British America the Rideau Canal extends in a circuitous course from Lake Ontario to Kingston down the Rideau to the Ottawa. The excavation is 120

miles, but the whole navigation 160; lockage, 437 feet; 47 locks.

The Welland Canal, by which the Falls of Niagara are avoided, is a very important work. Its locks are 150 feet in length of chamber, by a width of 261 feet; its dimensions being well suited for the class of vessels best adapted to the Western Lakes, and of which large numbers pass through it, as well of Canadian as American craft. This canal is 28 miles in length, having about 30 cut-stone locks. It surmounts an elevation between Lakes Ontario and Erie of 330 feet, while the elevation from tide-water to Lake Ontario, being over 200 feet, is overcome by the St. Lawrence Canals, seven in number of various lengths, from

12 miles to one mile (but in the aggregate only 41 miles of canal), having locks 200 feet in length between the gates, and 45 feet in width, with an excavated trunk from 100 to 140 feet wide on the water surface, and a depth of ten feet of water. These canals are chiefly used for ascending the stream, as large steamers, drawing 7 feet of water, with passengers and mails, leave Kingston at the foot of Lake Ontario in the morning, and without passing through a single lock, reach the wharf at Montreal the same day before dark. The great chain of canals is proposed to be completed by the construction of a ship canal from the St. Lawrence to Lake Champlain, so as to enable the propellers of Chicago to reach Burlington and Whitchall. The navigation of the Upper Ottawa is also being improved by canals. The canals of Canada now afford a large revenue, and accommodate a considerable trade. On the whole, it may safely be asserted, that no country in the world is possessed of more important and extensive canals, or a more magnificent system of inland navigation, than Canada. The following are the particulars of the St. Lawrence and other Canadian canals:

Lachine Canal, 44% feet lockage, 5 locks, 200 by 45 feet. Beauharnois Canal, 82% feet lockage, 9 locks, 200 by 45 feet. Cornwall Canal, 48 feet lockage, 7 locks, 200 by 55 feet. Farran's Point Canal, 4 feet lockage, 1 lock, 200 by 45 feet. Rapid Plat Canal, 11% feet lockage, 2 locks, 200 by 45 feet. Pt. Iroquois Canal, 6 feet lockage, 1 lock, 200 by 45 feet. Galop's Canal, 8 feet lockage, 2 locks, 200 by 45 feet. Welland Canal, 330 feet lockage, 2 locks, 200 by 26% feet. Sault St. Marie Canal, 20 feet lockage, 2 locks, 350 by 26% feet.

Sault St. Marie Canal, 20 feet lockage, 2 locks, 350 by 75 feet.

The carrying trade and navigation of the provincial canals of Canada in 1857 was as follows:—15,866 Canadian vessels, of 1,512,270 tons, which paid nearly £4,000 in tolls; 4,417 American vessels, of 802,924 tons, which paid about £3,400 in tolls. The net revenue, after deducting all incidental expenses,

was about £30,000, when the tolls were abolished in 1860.

By means therefore of these internal improvements of Canada, vessels drawing ten feet can be taken from Fond du Lac, on Lake Superior, to the Gulf of St. Lawrence, a distance of twenty-two hundred miles. The Eric Canal will, after the proposed enlargement, admit vessels drawing only seven feet, or about two-thirds of the capability of draught on the Canadian canals. And now that the employment of steam on the canals is no longer an experiment, this difference of capacity for draught is the more important. The present depth of the Eric Canal is four and three-quarters feet, and is a sufficient reason to account for the decrease in the canal revenue since 1852. The smallness of the locks is another disadvantage. The smallest locks on the Eric and Welland Canals are as follows:—

		Length.			Width.
Erie Canal	•	. 100	•	•	. 171
Walland Conel		160			961

The last annual report of the Canal Committee of the State of New York gives some interesting details. The whole length of the canals is nine hundred and twenty-four miles. The tolls received during the year 1859 amounted to 1,723,944 dollars, being a decrease from 1858 of 386,808 dollars. The greatest number of days in which the Erie canal has been navigable for the past nimeteen years was in 1859—two hundred and forty-two days; the least number in 1856—two hundred and fourteen days. The greatest number of boats passing any one lock during this period was in 1843, when 43,957 boats passed lock No. 36, Erie canal; in 1859 the number was 20,274. The greatest aggregate amount of tolls received in any one year since 1830, was in 1847, being 3,674,323 dollars; the least amount during the same period was in 1841, when only 1,034,883 dollars was received. The total amount of tolls received on all the canals from 1826 to 1859, both years inclusive, 69,674,428 dollars. The estimated value of flour which had passed on the canal and reached tide-water at Albany, from 1834 to 1859, is set down at 295,301,566 dollars; wheat, 116,914,062 dollars; other grain, 122,727,273; making a total of 534,942,901 dollars.

The aggregate length of the canals in the United States in 1858 was 51314 iles. This was independent of the enormous extent of inland river navigation. The following list gives the details of the principal canals in each State of the Union:-

CANALS OF AMERICA.

In Maine the Cumberland and Oxford Canal unites Sebagopond with Portland Harbour: length of excavation 201 miles, affording a navigation, natural and artificial, of 50 miles.

In Vermont, the Bellows Fall Canal, half a mile in length, overcomes a fall of fifty feet by nine locks. The White River Canal and Waterqueechy Canal, in

Hartland, are similar works.

In Massachusetts, Middlesex Canal reaches from Merrimack, at Chelmsford, to Boston: length 26 miles. Blackstone Canal extends from Worcester to Providence, 45 miles. Hampshire and Hampden Canal is the continuation of the Farmington Canal, from Southwick to Northampton, 20 miles. Pawtucket Canal, at Lowell; Montague Canal, at Montague; and South Hadley Canal, are short cuts passing round falls in the Merrimack and Connecticut.

In Rhode Island, Blackstone Canal, extending from Providence to Worcester,

is partly in the State and partly in Massachusetts. In New York, the Eric Canal extends from Buffalo, on Lake Eric, to Albany, on the Hudson, 863 miles; rise and fall, 698 feet; locks, 84. Champlain Canal extends from Whitehall to Albany, 72 miles. Oswego Canal extends from Salina, on the Erie Canal, to Oswego, on Lake Ontario, 38 miles. Cayuga and Seneca Canal extends from Geneva, on Seneca Lake, to Montezuma, on the Eric Canal, 20 miles. Crooked Lake Canal connects that lake with Seneca Lake, 7 miles. Chemung Canal extends from Elmira, on the River Chemung or Tioga, to Seneca Lake, 18 miles, with a navigable feeder from Painted Post, 13 miles. Chenango Canal extends from Utica, on the Eric Canal, to the Susquehanna, at the mouth of the river Chenango, 98 miles. Black River Canal extends from Rome, on the Erie Canal, to Carthage, on Black River, 76 miles. These canals have all been constructed by the State, making a total of 700 miles. The Hudson and Delaware Canal extends from the Hudson, near Kingstown, to the mouth of the La kawaxen, 83 miles, whence it is continued up the Lackawaxen, in Pennsylvania, 25 miles to Honesdale.

In New Jersey, the Morris Canal extends from Jersey city, on the Hudson, by Newark and Paterson, to the Delaware, at Phillipsburg, 100 miles: the principal elevations are passed by inclined planes. The Delaware and Ranton Canal is adapted for small sea vessels, and extends from New Brunswick, on the Ranton, through Trenton, to Bordentown, on the Delaware, 42 miles, with a navigable feeder from Bull's Island, in the Delaware, to the Main Canal at Trenton, 23 miles.

In Pennsylvania, the Pennsylvania Canal includes a series of canals and railroads, constructed by the State. The Delaware division extends along the Delaware, from Easton to Bristol, 60 miles; the main trunk, from the termina-tion of the railway at Columbia up the Susquehanna to the mouth of the Juniatta, and up that river to Holidaysburg, 172 miles. The Alleghany Mountain is passed by the Portage Railroad, from Holidaysburg to Johnstown, whence the canal is continued down the valleys of the Conemaugh and Alleghany rivers to Pittsburg, 104 miles, making the distance from Philadelphia to Pittsburg, by railway and canal, 394 miles. Susquehanna and North Branch division, from Susquehanna and North Branch division, from the mouth of the Juniatta to that of Lacawannock Creek, in the North Branch. West Branch division, from its junction with the North Branch to the base of the Alleghany Mountain, above Bald Eagle Creek, 72 miles, or, with side cuts, 76 miles of navigation. Beaver division, from the Ohio up the Beaver Creek, 25 miles. French Creek division, from Franklin, on the Alleghany, up the French Creek, 221 miles, or, including the French Creek feeder, 46 miles; making 600 miles of canal constructed by the State. The Sandy and Beaver Canal connects the Ohio Canal at Akron, and the French Creek division with Lake Erie at Erie. The Mahoning Canal is a cross canal of 83 miles long. There is a canal called the Beaver and Erie, 136 miles long, connecting with the Ohio 28 miles below Pittsburgh. Private works are the Lackawaxen Canal, extending up the Lackawaxen to Honesdale, 25 miles, and being a continuation of the Hudson and Delaware Canal. The Lehigh Canal, from the Morris Canal, on the Delaware, up the Lehigh, 46‡ miles. The Schuylkill Canal, from Philadelphia to Port Carbon, 110 miles. The Union Canal, connecting the Schuyladelphia to Port Carbon, 110 miles. The Union Canal, connecting the Schuyl-kill Canal, near Reading, with the Pennsylvania Canal, at the mouth of the Swatara, 80 miles, with a navigable feeder down the Swatara of 24 miles. Conestoga Canal, from Lancaster to the mouth of the Conestoga, is 18 miles in length. The Codorus Canal extends from York down the Codorus to the Suslength. quehanna. Length of canals in Pennsylvania, 900 miles. In Delaware, the Chesapeake and Delaware Canal lies chiefly in Delaware; it is

133 miles in length, and navigable by sloops, being 10 feet deep and 66 feet broad. In Maryland, Port Deposit Canal, 10 miles, extends from the boundary line to Port Deposit, along a line of rapids. Chesapeake and Ohio Canal, beginning at Georgetown and extending up the valley of the Potomac, is principally in Mary-land: it is completed to a few miles above Williamsport, 100 miles from Georgetown: the projected length to the Ohio at Pittsfield is 340 miles: the Alleghany Mountain is to be passed by a tunnel four miles in length.

In Virginia, Dismal Swamp Canal, partly in North Carolina, connects the waters of the Chesapeake with the Albemarle Sound, 221 miles. The James River Canal extends from Richmond, 301 miles; with this, the Blue Ridge Canal, seven miles in length, and some other short cuts, the navigation of James River into the valley is effected. The Roanoke Navigation is a series of cuts, locks, and sluices, rendering the river navigable from Weldon, in North Carolina, to Salem in the valley, 244 miles.

In North Carolina, the Dismal Swamp Canal is partly in this State and partly in Virginia: the North-West Canal, six miles in length, is a branch of this work.

Weldon Canal passes round falls in the Roanoke, 12 miles.

In South Carolina, the Santee Canal, 22 miles in length, connects the Santee with the Cooper River, which enters the sea at Charleston harbour. The Wingaw Canal, of 10 miles, was commenced, but is given up. Columbia, Camden, and other canals, have been constructed round the falls of the Saluda, Waterce Pedee, and Broad Rivers.

In Georgia, the Savannah and Ogeechee Canal extends from Savannah to the Ogeechee, 16 miles; it is to be continued to the mouth of Oconee, in the Alata-

maha, 80 miles.

In Alabama, the Mussel Shoals Canal will extend from Florence, at the head of steam boat navigation in the Tennessee, to a point above the Shoals, whence the Tennessee and Holston may be ascended to Knoxville, 700 miles from the mouth of the former river.

In Louisiana, Carondelet Canal is a short cut, admitting small seavessels, from lake Pontchartrain into a basin in the rear of New Orleans. The New Orleans and Teche Canal, from that city to the Atchafalaya, near the mouth of the Teche, is about 100 miles in length.

In Kentucky, the Louisville and Portland Canal, passing the falls in the Ohio below Louisville, is above two miles in length and 200 feet wide at the top: it overcomes a fall of 24 feet, and admits steam vessels of the largest size.

In Illinois, there is a canal from Chicago, on Lake Michigan, to the mouth

of the Vermillion, in Illinois, a distance of 961 miles, 60 yards wide.

In Ohio, the Ohio Canal extends from Portsmouth up the Scioto, a little below Colombus, thence through Newark to the Muskingum, at Coshocton; up that river and down the Cuyahoga to Cleaveland, 316 miles; with navigable feeders to Colombus, 11 miles, and Granville, 6 miles, &c. and a lateral canal of 9 miles to Lancaster; total length, 341 miles. The Miami Canal extends from Cincinnati to the Miami, near Hamilton, up the valley of the Miami to Dayton, 66 miles. It is to be continued to the Muamee, at Defiance, and down that river below the rapids. The Wabash and Muamee Canal terminates in this State.

In Indiana, the Wabash and Erie Canal, extends from the mouth of the Tippecance to below the rapids of Muamee, at Fort Meigs, in Ohio, a distance of 200

miles, 130 miles of the route is within the limits of Indiana.

The canal from Durance to Marseilles, which was begun in 1836, was opened

July 8, 1847. It is 83,000 metres in length, of which 17,000 are subterranean

passages through the Alps.

The canal of Isabella II. was inaugurated at Madrid on the 25 June, 1858, by the Queen. This great work, by which the bed of the Lozoya is changed, and its waters brought to the Spanish capital by a canal nearly 50 miles long was accomplished in seven years.

In India a canal of one hundred and eighty miles has been made in the valley of the Ganges at a cost of £2,000,000. It was commenced about 1847, and opened in 1857. Excepting the Erie and St. Lawrence Canals, it is the most valuable communication in the world; and, if it were carried to Calcutta, it would be the most important without exception. 20 to 30 miles of canal are open in Rajah-

mundry, and 40 miles in Madras.

A canal on a magnificent scale, with its branches about 406 miles long is form-

ing for the Punjaub, for which the waters of the river Ravee have been diverted. CANDIA, or CRETE. This island has been increasing in prosperity from year to year. In 1851 the population was estimated at 260,000 souls. In 1857 there was in the three cities of Canea, Candia, and Retimo 6,672 houses, 2,542 shops, and 51 soap manufactories. The exports, which in 1837 were only of the value of £64,000, had risen in 1856 to £433,200, and the imports in the same period from £127,804 to £406,832. The manufactures consumed in the island came principally from Great Britain and Syra, in Greece. The amount is about £52,000, consisting principally of cotton twist, grey calicoes, and printed cloths. A large portion of the export trade is carried on by Turkish merchants in vessels owned and manned by Turks. The revenue in 1858 was £144,752, and the expenditure about £27,300 less than the revenue.

CANDLES. In 1851 it was estimated that the average make of tallow candles was 1000 tons per week, and of wax, sperm, and composite 6000 tons per annum; but the manufacture has very greatly increased in the last eight or ten years. The shipments especially of composite or stearine candles have become very considerable. In 1853 the exports were 2,584,591 lbs. of stearine candles, and 1,295,189 lbs. of other kinds. In 1858 the exports of stearine candles were

3,242,652 lbs., and of other kinds of candles 981,706 lbs.

CAPE. The rapid increase in the quantity of wool, from 113,000 lbs. in 1833 to 7,700,000 lbs. in 1853, and then to 19,500,000 lbs. in 1859, proves the suitability of the climate for the breeding and rearing of sheep. The increase in the number of cattle and of sheep may be measured in some degree by the number of hides and skins exported; the number of hides in 1853 being 5,278, and, in 1857, 192,089; and of sheep and gost-skins, 168,708 in 1854, and 1,037,399 in 1857.

More than sufficient corn of all descriptions is now grown for the wants of the colony. The importation of American flour has already ceased; whilst on the

other hand 1,000,000 lbs. of flour, 8,000,000 lbs. of bran, 1500 quarters of barley and beans, and 3,119 quarters of cats, were exported in 1857.

The increased demand for Cape Wines in the English and other markets has been promptly responded to by an increased supply, one among the many proofs daily arising of the immense productive powers of this colony. The following figures show the quantities of Cape wines, exclusive of Constantia, exported during six years:-

Gallons 491,258 720,299 946,316 1852 Gallons 250,256 | 1855 . 271,767 | 1856 . 861,325 | 1857 1853 1854

The quantity imported from the Cape into this country has increased very rapidly. In 1854 we imported 282,043 gallons; in 1855 the quantity was 869,477 gallons; in 1856 it rose to 493,524; in 1857 to 787,753; in 1858 it was 654,119; and in 1859 to 786,620 gallons; in the last year the quantity consumed in the United Kingdom was 781,587 gallons. The value of this commodity has increased during the period just named from £49,357 to £178,559. It is the most valuable export of the colony next to wool; and any steps which may be taken for improving its quality or adapting it to English tastes deserve to meet with every encouragement.

It may be safely stated that but a mere spec of the land suitable for the growth

of corn and wine, for feeding cattle and sheep, is yet rendered productive. One of the finest wine districts (Oudts Horn) has only just become accessible to the dealer. Every new road or pass opened will in a few years afterwards increase enormously the surplus quantity of agricultural produce available for exportation. Another useful product of the soil is aloes, the export of which has increased from 9,319 lbs. in 1853 to 806,960 lbs. in 1857. The total quantities produced in the colony in 1855 were estimated at-

Whest Barley : Oats an	M	l Rye Malzo	•	•		994,2 400,2 501,3	87	Bushela.		Wine Brandy	,			:	34,221 Pipes. 4,496 "
And th	he	stock	of	hors	106,	cattl	le,	and she	ej	p, at					
Horses Cattle Sheep		•	•	•	•	•		188,947 458,886 6,500,000	ij			:	•		. 1,256,5 93 . 85,069
ans.						49		. 1 1	٠.				B	***	

The power to increase these already large figures may be best illustrated by comparing the actual area of the colony with the number of acres under cultivation.

The total area is 116,930 square miles, or very nearly 80,000,000 acres. That under cultivation is in

Wheat .										73,908
Barley Oats and Maise	•	٠		•		•		•	•	19,039 70,172
Vine .			•		•		•		:	11,854
Orangeries and	gardens						•		٠.	11,320
										186 909

The connection of the trade and commerce of the colony, with its agricultural prosperity, is too close not to advance with it, and we find, therefore, that the British exports to the Cape have increased from £985,266 in 1854 to £1,602,807 in 1858; and, by comparing this with the population, we find the average consumption per head of British manufactures in 1858, was just £6; nearly half the population being coloured, and, of course, comparatively small consumers.

To facilitate the management of this increasing trade, the colony is well supplied with banking accommodation. There are sixteen Joint-Stock Banks, the shares of which are all at a premium, and some at high premiums,

If we compare the consumption of British manufactures with that of other colonies, the importance of the Cape Colony will be strikingly exhibited.

Thus, the population of the Cape is 267,000. The value of our exports, £1,602,607, or £6 per head. Or if whites only are considered, fair allowance being made for the supply of the coloured people, it is above £10 each, whilst in-

			Population.	Value of our Per head.
	_	_	-	Exporta.
New South Weles .		:	. 859,000	£3,919,325 or £8*34
Victoria				5,419,354 or 10.63
British North American Col	lonies		. 8,000,000	2.159.055 or 1.015
Mauritius .	• • • •		226,000	601,899 or 2 66
West Indies			863,000	1.791,931 or 2-11
Timited States	• .		. 24,000,000	14,028,983 or 0.59
France	•		36,000,000	4.861.558 or 0.13

With the exception, then, of Victoria, there is no colony which consumes per head so large a quantity of English manufactures; and there is every reason to believe this proportion will increase as population progresses; for, as the climate, soil, and the physical features of a country mainly determine the employment of a people, so here the absence of rivers, and the want of coal and iron, will make a proper, so here the absence of rivers, and the want or coal and Iron, will make agriculture the most profitable occupation, and the colony will export, as its population increases, larger and larger quantities of wool, wine, hides, horses, corn, &c., importing, on the other hand, in as rapidly increasing quantities, British manufactures. In comparing the imports to the Cape Colony with those of our Australian colonies, we must, in justice to the Cape, show the nature of them. Thus Victoria, out of a Customs revenue of £1,777,000, receives2807,000 for duty on spirits
70,000 " wine
15,000 " beer
172,000 " tobacco, snuff, and cigars.

1,064,000

Whereas the Cape, with its Customs revenue of £260,000, collects only £22,500 from the same sources.

The attention given by the Cape Parliament to local matters is indicated by the great public works either in progress or in preparation, among which the railway to Wellington, 100 miles in length; the formation of docks, and a harbour of refuge in Table Bay; increased accommodation for landing and shipping at Port Elizabeth, and the tidal works at the Kowie River, are the most important.

refuge in Table Bay; increased accommodation for landing and shipping at Port Elizabeth, and the tidal works at the Kowie River, are the most important.

Twenty years ago there was but one newspaper in the colony; that was published under the direction of the Government, and rarely contained any political information. Now there are eight newspapers published in Cape Town during the week, four of which are printed by steam, and issue together 3,500 copies daily, except on Friday, when the Gazette only is published, the circulation of which is 1,400 copies. Besides these, there are sixteen country papers and four monthly magazines.

The following table shows the distances between Cape Town and the principal postal towns in the colony:—

F			•			•		•				
Name (of Post ?	rown.		1	files.	Name	e of P	ost T	WIL.		¥	Ciles.
Albert, Prince		•			282	Malmesbury	٠.		•			45
Alice			•		652	Middelburg .					•	550
Aliwal North					666	Namaqualand						396
Beaufort, Fort					646	Paarl .		•.				88
Beaufort, West					830	Port Elizabeth		••				510
Bedford .		٠.			582	Queen's Town			٠.	•		640
Burghersdorp				-	600	Richmond	_	•		_	Ĭ.	450
Caledon	٠.	•			72	Riversdale	••		•	•	:	206
Calvinia		. '	٠.		270	Simon's Town	_	•		_	•	22
Clanwilliam	٠.	•			150	Somerset East	•		٠.	•	·	547
Colesberg	. •		٠.		540	Stellenbosch		•		_	•	26
Cradock	•	• .	•	•	550	Swellendam	•	_	• .	•	•	144
George	. ·	•	'	•	300	Tulbagh		•	•		•	80
Graaff-Reinet	•	•		•	480	Uitenhage .	•		•	•	•	508
Graham's Town	•	,	•	:	600	Wellington		•	•		•	43
		•	•	•	600	Worcester .	•.		٠,	•	•	80
Hope Town	•		•	•	900			•			•	90

The number	er or	mns	ibita	nts	ın ı	the pri	ncibai	towns	18	given	88	ющо	WB	:	
Cape Town .				•		25,189	Elim			•			•		1,226
Graham's Town			•		•	5,482	Calp			•		•		•	628
Graaff-Reinet .		•		٠	•	8,662		depdal	•		•		•	•	8,540
Port Elizabeth	•		•		•	4,798	Pagr			•		•		•	8,800
George Town		•		•	•	1,934		nbosch			•		•	•	2,926
Swellendam	٠		•			2,276		ngton		•		•		•	1,672
Worcester .		•		•	•	2,072	≀₩ул	berg	•		•		•	•	2,062

In 1856 the imports of Port Elizabeth were £746,575; and in 1857 they amounted to £1,256,943, being an increase of more than half a million sterling. The value of the exports for 1856 were £787,490, and the exports for 1857 were valued at £1,065,101, being an increase of more than three hundred thousand pounds.

CUSTOMS DUES RECEIVED AT PORT, ELIZABETH.

1840 1844 1848	:	•	•	:	£4,113 10,799 25,759	1852 1856 1857	•		•	•	£49,198 80,000 122,162
			CUSTOMS	DUE	S RECE	IAEĎ V	T TABL	E BAT.			
1840 1844 1849	:			•	£37,491 57,048	1852 1856			•		£99,550 92,040

It will be seen by the above figures that the amount of Customs dues received at Port Elizabeth, in 1857, was within ten thousand pounds of that received in Table Bay in the same year.

PRVEKUB	AWD	EXPENDITURE	OF	THE	CAPE	COLOWA
REARMOR	ARD	EXPENDITURE	UF	1111	UAPE	COLORI

	Revenue.	Expenditure.	l	Revenue.	Expenditure.
1835	£138,417	£134,576	1847	£222.013	£193,688
1826	158,697	147.579	1848	234,875	245,985
1837	167,087	145,816	1849	237,805	274,235
1888	188,459	168,508	1850	245,785	245,655
1839	174,845	192,688	1851	234,884	223,115
1840	171,205	181,853	1852	289,482	252,495
1841	179,590	172,422	1853	308,478	268,111
1842	226,261	226,035	1854	295,802	809,497
1843	221,721	250,266	1855	806,026	329,565
1844	229,604	223,460	1856	348,362	131,838
1845	247,369	923,672	1857	491,505	460,676
1846	201.624	189,494	1858	463,010	494.959

STATEMENT of the REVENUE of the Cape of Good Hope in the years ended 31st December, 1854 and 1855:—

					1854.	1858.
Customs .					£122,184	\$129,841
Land Sales .		-			12,297	5,836
Land revenue			•		23,027	23,091
Renta exclusive	of land	-		-	554	608
Transfer dues		_	•	i	44.118	36,291
Auction dues	•	•	_	-	24,598	93,804
Licences	. •	_	•	:	3,568	30
Stamps .	•	•	_	Ī	21,284	23,857
Postage	. •	_	•	•	18,881	14,627
Fines, forfeiture	L and to	~ ~	CORTE		4,780	6,279
Fees of office	,		~~	•	2,893	2,986
Sale of Governm	ent mme			•	870	535
Reimbursement	to Cor			•	5,628	5,973
Miscellaneous re		or with	one.	•	700	213
Interest	corfee	•		•	180	84
Special receipts	•		•	•	192	3,812
phoner receibes	•	•		•	120	6,612
	Total		_		280.127	973,966

STATEMENT of the EXPENDITURE of the Colony of the Cape of Good Hope (exclusive of Expenditure by the Agent-General in London) in the years ended 31st December, 1854 and 1855;—

TOTA BLISH MENT	L			1854.	1855.
Civil		4	:	£29,587	£30,305
Judiciai .		-		27,262	26,396
Revenue	•	_	•	15,700	15,916
Ecclesiastical .	_	•	•	14,879	18,390
Educational .	•		•	8,639	8,799
Medical .		•	•	2,863	4,168
Police and Gaols	•		:	16,919	17.004
Border Department		•	•	85,333	17,094
	•	•	•		88,654
Pensions, Retired Allowan	οсь,	æc.	•	7,535	9,479
SERVICES, EXCLUSIVE OF RETA	ш	WO	IIS.		
Administration of Justice				5,558	5,017
Revenue services .	:			847	318
Ecclegiastical .	-	_		1,412	
Educational /		•		8,755	4,294
Charitable allowances	•		- :	600	1,005
Hospitals .		•	•	5.264	5,836
Police and Gaols	•	_	•	10,234	7,909
Rent .	-	•	•	8,058	3,089
Transport .	•		:	8,532	13,139
Conveyance of mails		•	-	23,098	22,045
Works and buildings .	•		•	4,668	6,608
Poods streets and builders	_	•	•	45,865	
Roads, streets, and bridge	•		•		88,715
Miscellaneous		•	•	4,796	9,454
Border Department	•		•	6,148	2,485
Parliamentary .		•	•	11,706	9,225
				287,456	285,255

The first bale of Eastern Province wool was shipped at Algoa Bay in 1823, and in 1858 its produce figured at £1,200,000. In point of fixed and moveable property the frontier districts will bear something beyond comparison with the Western, when, after glancing at the following figures, it is remembered that the former dates from 1820, and the latter from 1652:—

					Western.	Eastern.
Fixed property					£4,000,000 ·	£1,800,000
Stock .				•	1,450,000	2,840,000
Industrial produce	•	-	•	•	804,000	1,147,000
=						
					6 954 000	5 787 000

Leaving an excess of only £467,000 in favour of the Western Province.

In 1854 the total exports of the Cape Colony amounted to £652,000, and in 1857 reached £1,832,000, having trebled in three years—a circumstance, we believe, without parallel. In 1855 the colony's imports were returned at £1,175,000; in 1857, a lapse of only two years, they were £2,637,000.

COMPARATIVE STATEMENT OF THE RETURNS OF ARTICLES EXPORTED FROM PORT BLIZABETH, FOR THE YEARS 1854 AND 1855.

	185	4.	185	5.			e in 1855.	
ARTICLES.				. 	Incre	Ase.	Decre	880.
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
Aloes, Ibs	251,863	€3,578	870,711	4,677	148,848	1,099		
Beef and Pork, casks -	207	757		539			54	218
Butter, lbs	26,847	1,668		2,612	26,393	944		
Corn, Grain, &c.—Barley		-,	158	88	158	88		
Beans and Peas, muids-	27	87	510	472	448	435		ļ.
Bran, lbs			89,010	823	89,010	323		l
Oats muids	2,460	738	2,036	783		45	484	l
eathers (Ostrich), lbs	86	335		967	100	682		
ish, cured, lbs	48,300	242		450		208		
Fruits, dried, lbs		_	120	4	120	4		
Hides, number	7,630	5,316		27,965		22,640		
Horns, number -	80,719	764	101,117	2,072	61,890	1,806		
lorses, number	9	264	15	824	6	59		
vory, lbs	28,046	6,985		4.790	_ `	_	16,648	2,186
kins, Goat, No	85,262	11,114		10,779	2,394		,	385
,, Seal, ,,	237	64		,			287	60
Sheep	70,566	2,608	104,238	5,669	83,682	3,061		•
rallow, lbs	23,893	590	212,481	5, 153	189,089	4,563		
Wax, Bees, lbs	184	10		-,		_	184	10
" Berry, lbs			875	18	875	18	-0.	••
Wool, lbs	6,559,459	837,524	9,680,250		8,100,796	170,159		
Other articles		5.416	-,,	8,710	7		- 1	1,707
						- 1	- 1	-,,,,,,
Total	i	378,070		579,757		- 1	· · · · · · · · · · · · · · · · · · ·	

•					
			Increase - Decrease Total increase -	£206,125 201,679	£4,616
		SPECIE II	PORTED.	•	
	From Great Britain		1854. - Nil	1855. £100	
		EXPORT			
	Great Britain Ceylon		- £1,910 3,090	600 Nil	
	Mauritius Ditto, in foreign vesse		- 8,923 1,000	1,885 Nil	
			9,833	2,485	
		CUSTOM	DUES.	•	
	Customs duties .		- £40,757	41,875	
	Fees - Rent	• • • •	222 - 47	- 66	
			41.016	41.441	

The Custom Duties collected at the several ports throughout the colony

during the year 1859, amounted to £261,606. 4s 6d, showing an increase of £2,180. 17s 4d, over the year 1858, as follows:—

Port.		185	9.					1858,	,		
Capetown		£140, 194	9 1	l				£150,162	8	4	
Pimon's Town		148	4 :	1				685	12	4	
Port Beaufort		1.373	4 1	j				997	8	11	
Mossel Bay		1,176	13	l				1,180	14	6	
Port Elizabeth	•	118,018	18.1)	•		•	105,698	16	0	
		£261.606	4.			•		£252.426	7	٦,	

The shipments of wool from the port of Algoa Bay, the shipping port of the Eastern province were in 1857, 14,064,261 lbs., in 1858, 13,909,112 lbs., and in 1859, 15,464,280 lbs.

COMMERCIAL PROGRESS OF THE CAPE OF GOOD HOPE COLONY FROM 1800 TO 1859.

12	Revenue.	Expenditure.	Impo	orta.	Total Value	Exporta Total Customs Revenue			Total		
ž	Ber	Exp	Western Province	Eastern Province	Imports	Western Province	Eastern Province	Exporta.	Western Province	Eastern Province	Customs
1800	£ 70,919		£	-E	£ 246,382		£	£ 19,136		-	£ 8,680
1821 1860 1840 1850	134,493 171,205	121,463 181,653	402,819 831,551	18,455 79,247	420,774	910,764 602,464	24,439 72,031	235,208 674,495	22,031 37,501	4,140	41,641
1867	406,702	343,094	1,954,636 1,226,661	1,232,556	2,637,192	746,960	1,084,640 1,0 33 ,914	1,833,700	131,078	122,035	253,108

CASTOR OIL. The duty on this medicinal oil was removed on the 19th March, 1845, and the imports are now very large. In 1858, 21,475 cwts. were imported, valued at £58,292. Of this the great bulk, 20,592 cwt., came from the East Indies; small imports of castor oil stearine have occasionally arrived from the United States, but there was no commercial demand found for it.

CATECHU -See CUTCH.

CATTLE TRADE. In 1851 the cattle in Great Britain were estimated to amount to 4,500,000. In 1856 there were in Scotland about 1,000,000, and in Ireland 3,600,000, so that the number must be much larger than the former estimate. It is generally considered that about a fourth part of the entire stock is annually slaughtered for consumption, and we may therefore take it at fully 2,000,000 head of cattle. It is to the large towns that cattle live or dead are chiefly brought for consumption. The number of beasts shown at the Great Metropolitan Christmas Cattle market has not very largely increased, but the weight and quality of the meat are widely different from what they were some years ago. In Newgate and Leadenhall Markets, the supplies of meat now reach about 70,000 tons per annum, whilst throughout the kingdom the aggregate weight of butchers' meat consumed cannot be less than 750,000 tons a year. Mr. Ormanby, of the North Western Railway, computed in 1853, the cattle traffic passing over all the lines of railway in the United Kingdom at 1,253,353 oxen, and 181,925 calves, the aggregate value of this stock being over £14,000,000. This is omitting pigs, sheep, dead meat, &c.

One hundred and fifty years ago the average weight of a beast at Smithfield

Market was not above 370 lbs., now it exceeds 800 lbs.

If we take the second important town of the kingdom, Liverpool, we find the cattle trade there of a very large extent, upwards of 1200 beasts are slaughtered weekly, besides other stock. The Liverpool cattle market is chiefly supplied from Ireland. The number of cattle and calves imported there by sea, was in 1852, 176,000, and in 1853, 155,000. In addition to these large quantities are brought by railway from Scotland, and a few driven in from the neighbouring

counties. At Newcastle the cattle brought to market the last few years have averaged about 39,000 head; at Manchester, 91,000; at Glasgow, 34,000; and at Wolverhampton, 25,000 head are slaughtered in the year. The consumption of London is about 270,000 oxen, 30,000 calves, 1,500,000 sheep, and 30,000

The growing consumption of butchers' meat in the United Kingdom has become an important consideration, and especially, as to a future adequate supply. The graziers being unable to meet the increasing demand. The increased consumption arises from two causes, which in all probability will continue to operate, namely—the increase of the population, at the rate of 1000 per day, and the improvement in the condition of the operative classes, consequent upon the enormous extension of commerce and manufactures, and the abundant em-

ployment created by railway and other national works.

The importation of foreign cattle is wholly confined to a few neighbouring States, owing to the danger and difficulty of longer sea voyages, which involve a heavy per centage of loss by deaths. From those countries, too, whence we obtain the largest and best supply of cattle and sheep, the exportation appears to have reached its maximum. And, although the quality is greatly improved by judicious crossings with English types, the actual gross weight of meat is considerably smaller than formerly. This may, in some degree, be owing to the stringency of the Customs regulations for preventing the introduction of diseased animals into the country. But, on the other hand, it is evident that in such small, populous, and flourishing countries as Holland and Belgium, from whence we obtain the best supply of both cattle and sheep, the exporting power must necessarily be limited. The number of sheep from Germany has certainly increased; but these are chiefly Merinos, and their quality may be judged of, when we state that they do not fetch more than 15s to 18s each in the market, after an expense of 2s 6d per head for freight, and a heavy per centage of loss on the voyage.

Had it not been for the increased supply and improved quality of the animals imported from Ireland, the price of butchers' meat in London would have been much higher even than it now is. The old Irish herds of animals of all kinds have been supplanted or crossed with the best English breeds to so great an extent that the Irish graziers can now successfully compete with those of England in the size and quality of either cattle, sheep, or swine. Some Irish oxen having sold at Smithfield at from £21 to £27, and sheep from 50s to 65s per

The following table will show the decrease in the importations of animals since 1854:--

IMPORTATIONS OF CATTLE AND SHEEP IN THE YEARS 1850 to 1859 INCLUSIVE.

Years.	Cattle of all Ages.	Sheep.	Aggregate Number.
1850	66,462	143,498	209,960
1851	86,520	201,859	288,379
1852	98,061	230,037	323,098
1853	125,253	259,420	384,673
1854	114.200	183,400	297,600
1855	97,400	162,000	259,400
1856	92,777	135,588	228,365
1857	92,963	177,207	270,170
1858	59,001	184,482	243,483
1859	85,477	250,580	336,057
From 1850 to 1854	485,496	1,018,214	1,503,710
1854 to 1859	427,618	909,857	1,837,475
Total decrease	57,878	108,357	166,235

From the above facts it appears that the aggregate importation has fallen off considerably since 1854, being an average of 11,575 cattle of all ages, and 21,671 sheep and lambs per year; whilst the quality of the latter is much inferior to what it was previously, despite the great increase of price in the English market. There is therefore no reason to expect that we shall have much increase of competition in the cattle market with the foreigner.

According to the official returns the population of Ceylon CEYLON.

in 1855, was 1,609,234; of whom 6,320 were whites.

The persons employed in agriculture number 542,225; in manufactures 45,273; and in commerce 59,390. There are also 16,726 "aliens and resident strangers" not included in the population returns. The number of inhabitants to the square mile is nearly 66, there being an area in square miles of 24,700. In 1856, 68,004 coolies arrived in Ceylon; and 34,644 left the island; leaving a balance of settlers of 33,360. This source of increased population has been going on now for some years; and in certain parts of the island there are more foreigners than native inhabitants.

The Blue Book for 1857 gave the population of the island at 1,722,534, besides 5430 military, of these only 4815 were whites. The number of vessels that entered the ports of Ceylon in 1857 was 3624, registering 444,781 tons, of which 641 measuring 60,670 tons were in ballast. The value of the imports, including specie, was £2,714,565 in 1856 and 3,106,64 in 1857, of the exports £1,653,612 in 1856 and £2,588,460 in 1857. The principal imports in the latter year consisted of 46,569 tons of coal and coke, cotton manufactures and twist of the value of £380,600; 6400 bales of cotton, cutlery and hardware of the value of £16,000, salted and dried fish 5300 cwt.; paddy and husked rice 932,102 bushels, cattle 10,565, and haberdashery and millinery value £30,000.

The following statistics illustrate the progress of this fine British colony :---

	1837.	1847.	1857.
Population	1.243,000		1,727,964
Revenue	£871,994	437,502	578,098
Imports	£411,167	1,421,787	8,106,664
Exports	£308,000	961,116	2,588,460
Vessels Inwards	73,868 tons.	2.8.738	448,781
Vessels Outwards	79,562 tons.	228,998	431,782
Coffee shipped	43 164 cost	945,000	609 965

CHANKS. The shell which under this name forms so large an article of commerce to Bengal is the Turbinella pyrum of Lamarck. The slices or segments of circles of these solid porcellaneous shells are made into armlets and ments of circles of these solid porculaneous saeins are made into armieus and anklets, and pass under the name of bangles, being usually richly ornamented either with colours, gilt devices, or gems. They are never removed from the person, and are cast with the body either into the grave or river, hence the large demand for the shells. The chank fishery of Ceylon at one time employed 600 divers, yielding a revenue to the island government of £4,000 a year. It is now free. Frequently four and a half millions of these shells are obtained in a year in the Gulf of Manaar. Their gross average annual value as imported in the rough into Ceylon is about £8000.

CHEESE as a food and condiment is in general use in all countries where it can be easily obtained; and its varieties are innumerable from the globular Dutch and the hard horny Suffolk skim to the cream and rich Cheddar and ripe Stilton. Various estimates, founded on the supposition that two thirds of the population will each consume three quarters of a pound of cheese annually, bring up the home production to 100,000 tons, which added to the foreign imports would give a total consumption of cheese for the United Kingdom of about 120,000 tons. In 1850 there were produced in the United States 113 million pounds of cheese, nearly all of which was required for home consumption, the total export amounting to scarcely 9 million pounds.

The imports of foreign cheese, nearly all of which was retained for home consumption were in 1840, 226,462 cwt., in

1850, 347,803 cwt., and in 1859, 406,547 cwt. There is no reason why we should not make cheese enough for our own consumption, except, perhaps, that it would trench somewhat largely on the milk supply for our town populations. Of the imports in 1859, 323,132 cwt. came from Holland, and 61,768 cwt. from the United States. The duty on foreign cheese was last reduced on the 4th of June, 1853, from 5s to 2s 6d per cwt.; in March, 1860, the duty was entirely removed. The amount of duty received was £107,375 in 1848, £70,408 in 1852, and about £48,000 on the average subsequently.

CHICORY. The cultivation of chicory on the Continent is not of recent date. Its use has existed for nearly 70 years. When coffee as well as sugar and other colonial produce became high-priced in France and Germany, chicory was almost universally used by the labouring classes as a substitute. As Von Thaër truly observes of all plants which have been proposed as substitutes for coffee, and which when roasted and steeped in boiling water yield an infusion resembling coffee, chicory is the only one which has maintained its ground. Indeed even in this country it is held in extensive public estimation. At first it was only mixed with pure coffee as an adulteration, by fraudulent dealers. But this practice extended itself so widely, that for the defence both of the honest dealer and of the public the sale had to be legalized, and much chicory in the unmixed state is now hought and used instead of and along with renuine coffee.

is now bought and used instead of and along with genuine coffee.

Finding there was an increasing demand for the root, it soon came to be cultivated in this country as a marketable crop, being raised chiefly in the counties of Kent, Surrey, Essex, Bedford, Norfolk, Suffolk, Chester, and York. The extent of the home-production has never been very accurately ascertained. In 1840 Mr. McCulloch estimated it at 3000 tons; and in 1850 it was computed to have risen to 6000 tons, for within a circuit of ten miles of the city of York 3000 acres were then under cultivation with this crop. The yield of root from an acre is about 10 tons; which is reduced by drying, &c., to about 2½ tons. The admission duty free of foreign-grown chicory in 1854 led to the abandonment of much of the home culture; and according to Mr. Gladstone, there are not now 500 agree under suffere with phicory in Caret Ricking.

there are not now 500 acres under culture with chicory in Great Britain.

Mr. Braithwaite Poole, in his work, "The Statistics of British Commerce," published in 1852, stated that there were then about 10,000 acres under cultivation, producing 70,000 tons of green root. The actual production made into chicory powder in England and Guernsey he estimated at 14,000 tons, which at £22 per ton gave a total value for the crop of £308,000; the duty on foreign was then £20 per ton for raw, and 6d. per pound for roasted. In 1853, it was stated by a deputation of the coffee planters, that the consumption of chicory in this country amounted to 12,000 tons per annum.

How far circumstances are gradually giving to the infusion of chicory, in some countries, the character of a national beverage, may be judged of from the fact that we now import 6000 tons of foreign-grown chicory, besides the unascertained quantity produced here, which may be half as much, or fully as much again—that the quantity of the dried root consumed in France is about 16 million of pounds a year—and that in some parts of Germany the women are becoming regular chicory-topers, and are making of it an important part of their ordinary sustenance. The import of chicory root into Hamburgh in 1858 was 30,708 cwt., and of chicory powder and coffee substitutes 11,300 cwt.

The late Professor Johnston, in his "Chemistry of Common Life," speaking of chicory, says: "When ground, and exposed to the air, it becomes moist and clammy, increases in weight, and acquires a distinct smell of liquorice and a sensibly sweet first taste. It possesses in no degree the pleasant aroma which recommends the genuine roasted coffee. When infused, even in cold water, it imparts to it a dark colour, and a sweetish-bitter taste. To many the addition of a little of this bitter liquid to the infusion of genuine coffee appears an improvement—a remarkable illustration of the creation of a corrupt taste by an adulteration, which demands afterwards the continuance to satisfy its own craving. The bitter substance itself, however, is not considered unwholesome. Very many

bitter substances of this kind possess a tonic property, and it is not unlikely that bitter substances of this kind possess a touic property, and it is not unlikely that the bitter of chicory may be among the number. But the use of chicory, adds the Professor, appears to have originated from other causes than the discovery, or even the supposed presence of a tonic property in its bitter ingredient. A little of the reasted chicery gives as dark a colour to the water, and as bitter a taste, as a great deal of coffee, and hence it was originally instroduced into the coffee-houses for a purpose akin to that which takes cocculus indicus into the premises of the fraudulent brewer—it gave colour and taste to the beverage of the drinker, and at the same time saved the expensive coffee of the seller. The public taste creatually accommodated itself to the fraudulent mixture. seller. The public taste gradually accommodated itself to the fraudulent mixture: it became by-and-by even grateful to the accustomed palate, and finally a kind of favourite necessity to the lovers of bitter coffee."

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Tracing down the fiscal charges on chicory, we find that a quarter of a century ago the duty on the raw or kin-dried root was £1 per ewt., and on roasted or ground £2. 16s per ewt. under the 6th and 7th Will IV. c. 60. By an excise order, dated Ang. 31, 1840, it was ordered that no objection be made on the part of the revenue to dealers in and sellers of coffee mixing chicory with coffee, or to their having the same so mixed in their possession. Considerable quantities then began to be imported, and the consumption became extensive, on account of the comparatively high price of coffee. The Government then placed a duty on importation of £20 per ton on the root, and £56 per ton on the roasted or ground chicory. On the 10th Oct., 1854, the duty was taken off; and now a duty of £6 per ton is to be levied in 1861 both on foreign and British grown.

It is a strange fact that the consumption of coffee has not increased in this country, even with the reduction of duty. We consumed no more coffee in 1859 than we did in 1849, and three million pounds less than in 1846, notwithstanding a lower rate of duty and an increased population of about three millions. Whether the public taste does not run ou coffee, or adulteration has any influence in checking consumption, we cannot definitively say. Certainly the number of coffee houses has largely increased; but tea must, we presume, be the favourite beverage; for we find that the consumption has risen in the same period of ten years from 50 millions to nearly 764 million pounds. And yet the relative prices of the two dietetic substances are materially different. Belgium, with a population of about five millions, consumes as much coffee as we do, and the United States and North American Provinces six times as much. The production in the world is now in excess of the consumption, and the produce of Ceylon has to seek a foreign market, in consequence of the diminished demand in Great Britain. The admixture of chicory has certainly not extended the sale of coffee, and it has been attended with no benefit to the poorer consumers, who pay nearly as much for chleory, or the mixture, as they would for low-priced coffees, which are infinitely superior in nourishment, and in their general effect upon the constitution. It may do for the Continent to artificially protect the chicory grower; but we, who have extensive coffee-producing colonies, need no such bounty.

CHILI. The area of this republic in 1855 was stated at 139,335 square miles, and the aggregate population at 1,439,120; distributed as follows through the several provinces.

Provinces.					Population.	Provinces.			Population.
Atacama .					50,690	Conception · .			. 110,29k
Coquimbo					. 110,589	Arauco			. 43,466
Aconcagua					. 111,504	Valdivia			. 29,298
Santiago .		·			272,499	Chilos			61.586
Valparatso		-		:	. 116.048	Ueble			100,792
Colchagua	·	·	·	- :	. 192,704	(Warnillaman			153
Talca .					79,439	Colon Llanquibue			. 3,826
Maule .	•	•			. 156,244	(•	•	
	•	•	•	•	. 100,221	Total			1,439,120

The revenue in 1856 was £1,676,684, of which £831,640 was derived from customs, £199,467 from Government monopoly of tobacco, and £376,000 was from extraordinary resources; £213,573 being the final instalment of the Peruvian debt. The expenditure in the same year was £1,454,788. The public

53 debt stood at £1,655,875, of which £1,250,600 was foreign debt. The number and tonnage of vessels entered at the several ports of Chili in 1855 were-

Name	of Pot	ts.		Number of Vessels.	Tons Burden.
Constitucion	dere	:	:	1,967 272 154 915 359 206 63 128	361,748 112,068 62,165 118,468 106,877 29,692 15,879 85,710
				2,757	841,482

TOTAL VALUE of the IMPORTS of CHILI from each COUNTRY in each year from 1852 to 1856.

Countries		1852.	1858.	1854.	1855.	1856.
		Dollars.	Dollars.	Dollars.	Dollars.	Dollars.
Great Britain and Co	lonies .	5,457,007	4,082,950			
France and Colonies		2,231,486				
Germany .		1,561,684				
Belgium .		234,058		251,508		
Spain and Colonies	: :	907,189	243,028			803,813
Sardinia .	: :	66,313	77,842			136,069
Holland	: :	255,464	185,952	187,078		
China .	: :	192,460	221,485	214,466		
Polynesia	•	4,728	3,585	22,933		83,089
America (U. S.)		1,621,373				
California (U. S.)	:	1,853,193	46,019	88,475		
Mexico .		7,808				
Central America		98,765	87,901			
New Granada	: :	2,471	7	500,	444,994	
Brazil .		407,726	464,184	592,242		562,098
Paraguay .						11,234
Uruguay		114,996	129,629	150,133		218,445
Equador		79,728		123,020		
Peru	: :	795,578		1,097,864		
Bolivia .	: :	1,970	228	246	61,715	25,810
Argentine Republic		684,137	94,212		920,220	
Other Countries	: :	19,216		-,,	11,550	_
, <u>, , , , , , , , , , , , , , , , , , </u>	•					
	(Dollars	15,847,832	11,553,696	17,428,299	18,438,287	19,804,041
Total -	2.	8,069,466				
	•	,- 20,	-,- 20,000	-,-,,,,,,,,	-,	

The value of the exports from Chili in 1856 was £3,631,904.

CHINA. The imports from, and exports to, China are thus represented. Including Hong Kong, the imports to the United Kingdom, from the year 1854 to the year 1858, average £9,163,063 sterling annually. In the year 1857, when there was an enormous demand for the raw silks of China, the imports were increased to £11,448,659. In the following year they were reduced to £7,078,509, so that the result is that considerably more than a value of £9,000,000 is annually imported from China into Great Britain. But neither the imports nor the eximported from China into Great Britain. But neither the imports nor the exports give any adequate idea of the amount of British capital employed, for there is a vast deal of trade that is not represented in the official returns, as the coasting trade of China, the trade of China with foreign countries, such as Siam, Cochin China, and other places. There is believed to be now engaged in the trade with China an amount of British capital more nearly approaching fifty than forty millions sterling, while the revenues derived from this trade exceed ten millions. Between three and four millions of this are received into the Treasury of the Indian Empire, and the balance into Her Majesty's exchequer in this country. The export trade to China has progressed wonderfully. In 1854 the exports of British and Irish produce were £1,000,716; the average for five years is £1,964,848, and for the year 1859, they amounted to £4,457,631, including Hong-Kong. Independent of this there has been a considerable export of foreign and colonial merchandise. These statistics do not represent the most important articles of British commerce, and those articles

are opium and silver.

The trade at Canton is associated with this remarkable fact, that it continues about the same as it did before the opening of the other ports, that is to say the opening of the other ports has led to an extension of our relations equal to the whole of their trade. From 1852 to 1855, the Canton tonnage averaged 182,935 tons; in 1856 it was 209,673 tons. There, as elsewhere, the general proportion of shipping engaged is about one-half British, one-quarter American, and the other quarter the rest of the world. In Canton about two-thirds of the shipping is employed in the direct trade, and about one-fourth in the indirect trade. The annual exports averaged for the years 1852-56 (including ten months of 1858) 5,654,684 dollars; for the ten months of 1858, 6,799,752 dollars. The average imports are 6,992,919 dollars; for the ten months of 1858, 10,656,589 dollars.

Shanghae is the port which represents the maximum of trade with China, and the returns from thence are of a much more satisfactory and authentic character than those from any other port. The Custom-house there is admin-

istered by foreigners.

The average shipping from 1855 to 1858 was (tonnage entered) 193,102 tons. In 1858, it was 242,624 tons.

The average value of exports and imports in British and American vessels W86:--

		In 1866.		In 1857.	•	In 1858.
Exports		. 8,601,462 dol.	•	14,549,226 dol.		19,017,049 dol
Imports	•	. 28,637,981 ,,	•	83,834,435 ,,	•	30,623,759 ,,

From 1852 to 1856 the entries of vessels at Canton numbered about 400, of 150,000 to 200,000 tons in the aggregate; subsequently the trade was interfered with by the war and possession taken of Canton. At Shanghae the entries in 1858 numbered 754 vessels of 242,624 tons with cargoes, of which 290 and 120,205 tons were British. At Amoy, the entries in the same year were 596 vessels of 180,559 tons, of which 331 and 99,331 tons were British. At Foochowfoo the entries were 218 vessels and 75,522 tons, of which 166 and 49,751 tons were British. At Ningpo, 115 British vessels of 17,845 tons entered in 1858. The British imports at Canton in 1856 were to the value of £3,171,239, and the exports to £1,951,599. The quantity of tea shipped in 1856 from Canton was 42,740,404 lbs., of which 31,819,000 came to Great Britain. The imports into Shanghae in 1858 were to the value of £5,893,967, and the exports £9,555,417. The extent of the trade of Shanghae may be judged of by the following details :-

TOTAL QUANTITIES and VALUE of SILK and TEA EXPORTED from the PORT of SHANGHAE, in each Year from 1852 to 1858.

7	Sm	LE.	TEA.			
Years.	Quantities.	Value.	Quantities.	Value.		
	Balea.	£.	Lbs.	£,		
1852	26,216	1,928,120	46,732,036	2,174,600		
1853	41,293	2,749,658	49,773,920	2,485,099		
185 4	48,120	2,714,049	86,123,600	1,796,459		
1855	55,537	8,568,906	76,711,659	8,413,584		
1856	91,924	7,714,488	42,871,433	1,647,012		
1857	76,464	7.820.118	45,757,711	3,351,661		
1858	72,729	Not stated.	45,465,702	Not stated.		

TEA EXPORTED to various Countries from Shanghab in 1858.

Countries.	Black.	Green.	Total.
Great Britain Hong Kong, Whampon, and Foochoo Australia The Continent United States Halida Xand Montreal Manilla	 Lbs. 12,507,087 765,417 326,129 529,080 71,089 43,914	Lba. 8,214,620 1,146,736 .143,602 . 72,775 21,051,555 584,148 9,600	Lba. 20,721,657 1,912,153 469,731 601,855 21,122,644 628,063 9,600
Total .	14,242,666	81,223,036	45,465,702

TOTAL VALUE of the British Trade in British and other Vessels at the Ports of Shanghae, Amor, and Foochowsoo.

Years.	Imp	orts.	Exp	ports.	Rate of Exchange
1852 - 1853 - 1854 - 1855 - 1856 - 1857 -	Dollara. 4,685,571 3,939,848 1,179,756 3,497,895 6,162,369 10,387,084	£. 1,171,398 1,280,450 368,673 1,122,241 2,156,829 8,527,280	Dollara, 11,484,200 13,344,892 11,702,147 19,963,763 25,803,632 32,411,487	£. 2,871,050 4,337,091 3,656,921 6,4(5,040 9,031,271 11,005,567	8. d 5 0 6 6 6 3 6 5 7 0 6 91

Progress of British Trade at Shanghae from 1848 to 1857.

Years.	Imports.	Exporta.
1848 1849 1850 1851 1852	£. 548,797 992,888 977,039 1,141,106 1,171,893	2. 1,100,658 1,465,621 2,005,151 2,899,541 2,871,050
1853 1854 1855 1856 1857	1,280,451 368,678 1,122,241 2,156,829 8,527,280	8,837,090 8,666,921 6,405,041 9,031,271 11,005,567

VALUE of BRITISH TRADE in BRITISH VESSELS at AMOY.

Years.	Imports.	Exports.	Rate of Exchange.
1853 1854 1855 1856 1857 1858	£ 183,306 141,027 244,341 221,500 318,034 925,944	£ 62,558 78,789 197,266 211,292 844,768 699,857	5 0 5 0 4 11 4 11 5 0 4 7

VALUE of BRITISH TRADE in BRITISH VESSELS at FOOCHOWFOO.

Years.	Imports.	Exporta.
1854 1856 1857 1858	£ 34,896 97,916 97,960 879,846	£ 459,649 814,034 1,382,442 1,184,111

QUARTITIES OF TEA EXPORTED to various Countries from the Port of FOOCHOWFOO, in each Year from 1855 to 1858.

Countri	CS.		1855.	1856.	1857.	1858.
Great Britain United States Australia . Continent	:	:	Lbs. 22,700,000 11,900,000 900,000 1,000,000	Lbs. 22,883,100 7,863,200 4,372,100 3,119,800	Lba. 20,489,400 7,267,280 2,730,560 1,395,700	Lba. 18,512,500 4,885,700 8,960,100 620,300
Total		•	86,500,000	38,238,200	81,882,800	27,689,600

The following is a SUMMARY of the TRADE with NINGPO.

Yeara.	Imports.	Exports.	Rate of Exchange.
1858 1854 1856 1856	£. 26,694 70,568 77,206 136,359	£. 1,210 49,972 182,776 784,161	a. d. 6 2 6 8 6 8 7 3

The aggregate amount of our trade with China, imports and exports, including those of India, reached in 1857 the amount of £32,122,469, although there was a cessation of the tea trade with Canton. In 1858, even with the effects of the commercial panic of the previous year, and the steppage of Canton trade, the aggregate commerce with China, British and Indian, was over £20,000,000, exclusive of any colonial trade, Australian, or with the Archipelago. In 1833, the declared value of British manufactures exported to China was only £630,578; in 1840, it was as low as £524,198; and, at the close of the war of 1842, it stood at £969,861. In a few years after the opening of the five new ports to foreign commerce, the value of British goods shipped had increased fully 50 per cent, while it has now nearly trebled in value:—

Year.	Value of the British Exports to China.	Value of the Imports from China.
	a	
1849	1,537,100	6,170,672
1850	1,674,145	l : '
1851	2,161,268	7,971,491
1852	2,508,599	7,719,771
1858	1,749,597	8,255,215
1854	1,000,716	9,125,040
1855	1,277,944	8,746,590
1856	2,216,123	9,421,648
1867	2,449,982	11,448,689
1858	2,876,447	7,048,000
1859	4,457,681	I

From the foregoing figures it will be seen that the aggregate direct trade with China may be taken at about £12,000,000, 1857 being an exceptional instance. Although the balance of trade would seem to be largely against us, it is more apparent than real, as much of the trade is carried on through India, and we are equally interested in that, and also in the American trade to some extent. The shipments of silver to China are, however, large in payment for merchandise, as may be seen from the following return:—

EXPORTS OF SILVER TO CHINA, FROM ENGLAND.

					£						£
1850					58,972	1 1855					1,876,773
1851					102,816	1856					8,166,514
1852					51,816	1857		·	:	:	4.479.815
1853					455,676	1858			:	•	1,355,117
1854			- 1		1.920.496	1859	·			•	8,374,950
	•	`1	860, 1	to 2	l June		£	1,859	,225.	٠	40.4-00

Part of the silver shipped this year is for Government account.

For one of our most important articles of consumption we are exclusively dependent upon China, the petty supplies received from India being scarcely worth notice. And it is somewhat strange that, while such strenuous efforts have been made of late years to extend the production of cotton in different countries, so little has been done towards promoting the growth of tea-an article of easy culture and not difficult manufacture, and which pays the grower so well. The import and consumption of tea in this country has more than doubled since the consular ports were thrown open. So also with silk: the demand has been extensive, and China can supply enormous quantities. From a trivial export, silk has become the second great staple of shipment. Although our imports from China have hitherto consisted chiefly of three or four principal staples, there is no reason, looking at the extensive resources of that vast and extended empire, why they should continue so restricted, Something has even been done of late years in this respect. Chinese wool has come in to some extent, having risen in some years to half a million of pounds. Although from its harsh quality, and mixed and dirty character, it is only fitted for coarse woollens, yet it is saleable at low prices. There are other drugs besides camphor, rhubarb, and essential oils to be obtained from thence. A demand has sprung up for sugar, and we can draw supplies from China as well as from Manila. There are other spices, too, besides cassia lignea to be procured from China.

In addition to the exports to Great Britain, China exports tea, silk, drugs, and sundries to the continent of Europe, North and South America, Australia, New Zealand, India, and the various settlements of the Eastern Archipelago. The Indian trade, as the figures we have given show, has now reached about £10,000,000 in value, one article, opium, constituting the chief export; and this since the recent treaty had increased in value by upwards of £1,500,000. The shipments of cotton from India to China would seem to be declining. Whether this arises from a greater demand from England, an increased home production in China, or the internal rebellion, we are not prepared to state. The American imports from China since the opening of the five ports have more than doubled

in value.

The British interest in the indirect trade, of which we have already spoken, is

The British interest in the indirect trade, of which we have already spoken, is also worthy of notice. In addition to the large balance against us on the direct trade, we have to provide for that created by the excess of value in exports to Australia, America, &c., all of which are paid for by bills drawn on London. We may except a small portion remitted direct by Australia in gold. India forms the only exception. Her exports amount to over nine millions, while the imports are under one million. In this way we settle, indirectly, the balance of trade.

The extension and development of commercial intercourse with the nations of the west will materially enlighten the people as to the existing state of manufactures, industry, and invention. It will tend to dispel that arrogance and conceit—that jealous feeling which has set its face against familiar intercourse with Europeans, and prohibited them from passing beyond mere coast provinces.

INDIAN TRADE WITH CHINA.

		EXPORTS			IMPORTS.
Year.	Opium. Value.	Cotton. Value.	Other Articles.	Total.	Silk, Drugs, and Sundries. Value.
1849 1850 1851 1852 1853 1854 1855 1856 1857 1858	5,\$45,719 5,543,588 5,074,078 6,082,307 6,470,916 8,802,469 5,684,978 8,592,532 6,505,586 8,241,032	£ 1,013,512 741,504 1,160,364 2,291,926 1,026,444 808,570 639,143 810,628 715,852 394,393	2 167,059 116,754 118,093 148,784 192,959 93,695 121,013 189,793 347,546 782,312	6, \$26, 290 6, 401, 846 6, \$52, 535 8, \$23, 017 7, 620, 319 6, 704, 734 6, 445, 134 6, \$62, 953 7, 566, 837	£ 831,361 809,801 963,369 924,159 866,943 810,337 915,049 767,717 599,673 915,858

	3	Value.	26,713 8,476 1,50,466 1,20,046 1,20,046 1,20,046 1,106	Value.	2017 628 28,760 28,2760 28,124 21,244 21,844 21,640 24,811 10,070 68,673 10,070 88,110 10,070
	1863,	Quantity.	88,611,643 88,611,643 8,834,617 1,116 670 183,766 81,397 88,114	Ougnetty.	7. 1885 56,086 56,086 6,233,991 6,231,991 197,485 197,485 187,485
NA.	ð	Value.	67,180 8,773 6,937 1,646,138 2,631 13,630 11,630 11,630 12,630 17,488 17,834 1,834 1,630 1	Value.	21,232 25,758 25,758 27,283 1,74,381 1,4,284 14,138 14,041 27,600
EXPORTS OF BRITISH PRODUCE AND MANUFACTURES TO CHINA	1882	Quantity.	2444 18,066 1,506 6,638,669 638,689 171,390 171,390 175,715 64,764	Onantity.	8,463,615 8,463,611 8,463,611 8,463,611 7,432 8,660 7,543 8,660 111,889
FACTURE	1.	Value.	2.11.30 2.766 10,568 1,466,316 180,047 180,047 2.349 7,249 33,374 38,417 16,901 16,901 1,508 66,656	Value	215,676 13,620 13,50,680 1,320,680 21,320 21,247 2,447 6,538 60,108 81,703 6,879 862,181 1,323 1,923 1
D MANU	1891.	Quantity.	4,883 6,806 7,806 4,816,330 4,817 1,911 422,611 147,578 46,661	Ouentity.	8,118 81,188 81,686,502 6,182 6,146 8,592 8,186,738 92,109
DUCE AN	ď	Value.	## 200 11,438 11	Value	27,766 19,294 18,214 78,592 9,652 9,653 9,484 7,381 1407 110,396 130,396 130,396 1407 1407 1407 1407 1407 1407 1407 1407
ISH PRO	1850.	Quantity.	3,157 21,170 73,209,187 710,137 710,137 710,137 710,137 8,839 8,839 1,168 1,168 1,168 1,169 161,771	Onantity.	2,814 80,906 74,033,486 9,864,600 1,746 9,103 381,688 17,789
OF BRIT	9.	Value.	27,911 9,737 4,259 11,762 8,968 9,683 9,878 8,788 8,788 8,788 8,788 8,788 8,788 8,788 8,788 8,788 8,788 8,788 8,788 8,788 8,788	Value	58,178 11,733 28,230 28,638 28,638 18,238 1,158 1,158 14,040 13,339 14,770 1,673 1,673 1,673 1,673 1,673
EXPORTS	1849.	Quantity.	2.789 2.484 2.438 78,301,188 8.382,994 219,068 7,397 8,390 1,727,396 155,446 155,446	Quantity.	1 7
	and other	שני מניומף	Apparel, Slops, and Haberdashery Beer and Ale Boota Cinders, and Cin Coola Cinders, and Cin Coolors, wright and unwright, evia Cottons, manufactured — yards Cottons, manufactured — yards Cottons, wright and unwright, evia. Inch Barthenware and Porcelain pleces Glass Hannisctures — owns. Inch and and alot — yards Tin Plates — yards Tin Plates — yards Woollens — yards Woollens — yards Hi chier Articles — ralbe	Articles.	Apparel, Slops, and Haberdaahery Beer and Ale Coala, Cinders, and Culm tons Coppor, wright, and unwright, owts Cotions, manufactured yards Cotion Tarn In Earthenware and Percelan pleese Glass Manufactures Cotion Tarn Land and Shot yards Lineas Tin Plates yards Tin Plates yards Tin Plates yards Tin Coalans

EXPORTS OF FOREIGN AND COLONIAL PRODUCE FROM GREAT BRITAIN TO CHINA.

	18	1849.	1850.	9.	1881	31.	1862	25	1853.	ಕ್ಷ
Articles	Quantify.	Computed real Value.	Quantity.	Computed real Value.	Quantity.	Computed real Value.	Quantity.	Computed real Value.	Quantity.	Computed real Value.
Cochineal	61	£415	181	£2,663	196	£5,703	7.5	£524	8	2,119
Cora, in iragments - 10s.	11	11	1 1	1 1	71,	080.4	21,2/4 42	14,003	200	, v.
Load, pig, and sheet - tons	880	8,697	3	14,800	2	15,721	153	2411	283	8,763
Optum	15,682	12,023	8 08	6,714	5,571	4,271	18	1	1,165	883
Spirite Brandy - reallons	-	182	A Kin	2 451	7.788	016	7,785	2,735 203	53,063	4,487 9,995
	25,433	11,655	20,204	16,681	26,663	8,447	29,446	609	28,236	7,661
All other Articles	1	12,728	1	8,103	I	31,281	١	24,516	1	28,473
Total		62,258		49,510		72,185		54,751		67,168
	- A	1864.	181	866.	31	1856.	1857.	57.	1858.	96
Articles	Quantity.	Computed real Value.	Quantity.	Computed real Value.	Quantity.	Computed real Value	Quantity.	Computed real Value.	Quantity.	Computed real Value.
Cochineal cwta.	86	62,038	55	£597	208	66,635	100	€2,229	3	£1,749
Coral, in fragments - 1ba		3,170	•	1	ı	1	i	1	1	ı
Glass, window, and shades cwta	872	<u>2</u>		6	289	5	8,843	6,153	14,965	11,216
Lead, pig, and sheet - toni	1	1	8	1,116	22	7,784	8	1,861	31	£
Opium	1. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2.	1,804	1,927	1,326	1	1	1	1	12,051	30,856
		į	1;	1	176,902	16,295	21,481	200	96,800	2000
Spirits, Brandy - Gallons	6,727	27.75	11,430	12,0	328	26.	13,962	8,210	10,154	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
All other Articles		5,630	Of Part	5,062	1,000	16,683	186,0	10,845	16,650	28,786
Total		26,400		26,052		70,611		66,193		90,003

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CHINA.	
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ACTURES	
B	
MAN	
AND	
XPORTS OF BRITISH PRODUCE AND MANUFACTURES TO	
BRITISH	
OF	
EXPORTS	

		OHI	90	.,,	_	
.3.	Value.	26,713 8,476 16,494 13,046 1,305,995 198,485 198,485 7,288 8,106 16,667 18,663 18,663	198,604 4,201 194 40,303	888	Value.	<u> </u>
1853.	Quantity.	2,110 25,230 2,330 2,330 2,234,617 1,116 1,116 155,766	61,397 68,114		Quantity.	6,281,981 6,381,883 6,381,991 6,381,991 6,380 8,300 8,31,450 6,340 6,340 6,340
ď	Value.	£7, 120 £,773 €,534 £,534 1,646, 138 2,8,631 2,507 7,570 11,616 7,670 13,630	4.537 4.537 1,070 50,956	867	Value.	21,238 25,738 25,738 25,238 1,57,387 16,431 16,631 16,631 17,438
1862.	Quantity.	2,444 11,0065 1,0065 140,922,065 6,633,669 1,305 171,330	175,716 64,764 —		Quantity.	9,741 88,048 84,048 131,587,515 4,635 1,435 7,435 7,435 121,688 121,688
1.	Value.	211,130 21,130 10,566 10,668 11,406,816 118,047 2,349 7,349 7,349 81,714 88,385 16,063	208,417 4,983 1,509 59,866	1866	Value	215,676 13,620 13,620 13,630 13,630 13,630 13,630 13,630 13,630 13,730 13,730 13,230 11,233 10,103
1881.	Quantity.	4.816.85 4.806.85 8.806.85 4.816.830 4.817.85 4.877 4.877 4.877 4.877	147,578	ar.	Quantity.	8,118 88,686 6,132 8,775,630 8,775,630 8,146 8,146 8,146 1,16 1,16 1,16 1,16 1,16 1,16 1,16
8	Value.	26, 202 11, 433 11, 433 11, 433 891, 691 196, 669 136, 669 137, 569 167 89, 294 167 167 167 167 167 167 167 167 167 167	296,485 6,413 699 42,893	1866	,-	27,766 18,294 18,294 18,212 28,323 28,323 28,323 28,323 11,434 11
1860.	Quantity.	21,170 21,170 77,200,187 3,116,176 147,737 7,083 8,339 8,339 1,168 465,399	161,771 66,943 —	181	Quantity.	3,814 30,506 30,506 3,664,600 1,746 3,102 331,633 41,733 11,733
	Value.	67,911 6,737 6,737 11,703 879,663 118,667 118,667 8,339 8,339 8,738 8,738 8,738 8,738	267,230 2,190 1,468 36,953		Value	10.718 10.718 10.718 10.718 10.718 10.718 10.718 10.718 10.718 10.718
1849.	Quantity.	& & . t.		1881	Quantity.	1 7
1000	Arteiot.	Apparel, Stops, and Haberdashery Boer and Ale barels Coal, Cinders, and Cuim tons Copper, wright, and unwright cert Cotions, manufactured yards Cotions, manufactured yards Cotions, manufactured yards Cotion Tenn Place Sarbienware and Porceian pieces Glass Manufactures over Ilon, wrought and unwright certs Lead and abot one Lineas roughts These yards The Places value	Woollens - pleces		Articles	Appared, Stope, and Haberdashery Beer and Ale Coale, Cinders, and Culm borne Coale, Wright, and Culm borne Cotions, manufactured yards Cotton Farm Fartherware and Porcelain pieces Glass Manufactures Tron, wrought and unwright, ewin The Plates Wollens All other Articles Troid Total

EXPORTS OF FOREIGN AND COLONIAL PRODUCE FROM GREAT BRITAIN TO CHINA.

	18	1849.	1860	.0	1821.	11.	180	1852	181	1853.	
Articles.	Quantity.	Computed real Value.	Quantity.	Computed real Value.	Quantity.	Computed real Value.	Quantity.	Computed real Value.	Quantity.	Computed real Value.	
	18	£415	121	£2,663	198	£5,703	7	£524	16	22,119	
Corre, in magments	I	l	ì	1	7,180	2,590		10,639	0604	2,545	_
		ı	1	1	11	2		=	•	*	
Load, pig, and sheet - ton	9	8,697	3	14,800	25	16,721		1	88	8,763	_
Optum	_	12,023	808	6,714	5,571	4,971		1	1,165	88	_
		1	. 1	1	1	1	26,256	257.2	43,088	4,487	_
Spirita, Brandy gallons	16,318	6,731	6,558	2,451	7,783	8,210	7,765	\$,208	5,371	2,925	_
	-	11,655	89,204	16,681	25 ,663	8,447	29,446	8,699	23,236	7,651	_
All other Articles	1	12,728	i	8,103	ı	81,281	ł	24,516	1	28,473	_
Total		62,268		49,510		72,185		54,751		67,168	
	- 18	1864.	35	866.	1866	26	182	1857.	18	1858.	_
Articles	Quantity.	Computed real Value.	Quantity.	Computed real Value.	Quantity.	Computed	Quantity.	Computed Computed	Quantity.	Computed	_
Cochineal - cwt		£2.038	48	2.697	800	£6.635	100	69 999	83	£1.749	
fracments -	6.341	\$170	1	,		1	1	1		1	_
Glass, window, and shades cwt		98	13	G.	283	421	8.343	6.153		11.216	_
Load, pig, and sheet - tons		1	8	1,116	939	7,784	8	1,861	31	3	
Optum		1,804	1,927	1,325	1	1	ı	1		90,856	_
Quickellver 1b		1	1	1	176,903	16,295	21,481	2,238	96,800	5,503	_
Brandy -	ns 6,737	2,776	11,430	8,477	9,236	4,651	12,962	8,210	10,154	808	_
		10,723	86,870	12,476	47,680	19,143	58,991	24,156	46,550	17,440	
All other Articles	1	5,630	ı	5,052	ı	16,683	1	10,845	1	28,786	_
Total -	,-	26,400		26,052		70,611		56,193		\$0,005	_

IMPORTS FROM CHINA, INTO THE UNITED KINGDOM IN THE PAST TEN YEARS.

C	HI												-	30												C	E	11	[
1858.	Value.	68.610	2 491		er 7	4.300	2 689	5	7,001	9,597	4.676	10.027	2.057.584	10501		1		8,576	1	8,818	47	8,227	4.885		4.432.989	11.606	10.497	1.575.818	8 SEK 218	0,400,010
18	Quantity.	780	70 458		3	26,705	110.088		1	1	978.4	66.848	9 R38 047	185 501		1		7,167	ı	1.906	2,237	8.12	- 1	-	68.639.727	200	254 008	3		
25	Value.		£19.490		82.6	443	ATA	100	7200	£ 206	16,159	6.193	1.758 2ne	27 PAR	3	1		2	1	1	ı	1	ı	41.720	4.216.918	1 709	200	1.590.453	1 710 99	11/47/11
1852	Quantity.		940 pm		ļ	2,662	154.911		1	1	82,849	41.286	2.418.843	716 87		ı		19.287	13,653	ı	1	1	ł	41.717	65,295,202	303	105.959			
1851.	Computed Value	,	23 OEO		98%	9.743	6.268	9076		4,476	1,048	7.529	1,489,934	241.45		1		18,131	ı	ı	ı	1	ı	7	4.487.766	878	6.300	1.902.404	7 071 401	T64.7164
18	Quantity.	,	41.001		t	68,456	187.873		1	1	2,197	50,199	2.055.083	44.052		1		2007	12,518	ı	1	١	1	7	68,487.979	*	69.546	1		
30.	Value.		£34.470		ı	700.5	1		1	1	ı	13,417	1.150.423	26.209		ı		8	ı	ı	1	i	į	618	3,086,500	2.191	870	1.632,160	A 940 095	and leading
1850	Quantity.	1	489 e09		ı	94 ,769			j	i	ļ	89.447	1,769,882	49.489	}	1	1	16,801	6,169	ı	5,637	1	ı	618	49.868.001	313	14.824			
1849.	Computed Value.		614 BAD		1	7.143			ı	1	1	A.987	1 238 005	10 400		ı		20,4	1	1	1	ı	1	et	2.429.510	23 151	1	1.892.170	0.100 0.00	6,170,072
82	Quantify.		2 E 2 E	200	:	102.861			1	1	ı	60.010	1 845 525	18,019	106	ı		8,870	5,630	22	2,085	1	ı	œ	58,102,199	8108	2	1		
	Articles	- There		,	thenware- walue	Goods - pleces	Property . The		d Lacquered ware	thing - value	100	4	2			- I		oods -		4	8				1	1		ticles - walne	1	
		Camphor			China or Ear	Ootton Piece	Others mee			Mats and Ma	Olla, essentia	Rhaherb	Willes Taw		*	. 43600	" manut	" plec	. Spay	25		Pop	The	Surre	Tes		Wool	[All other Ar	Total	7007

IMPORTS FROM CHINA, INTO THE UNITED KINGDOM.

418,383 19,747 326 32,86 18,747 18,747 196 19,747 196 196 196 196 196 196 196 196 196 196	Tanana	24,577 8,194 4,888 8,977 13,625 9,977 13,624 9,306	24,577 4,838 4,838 3,977 4,605 105,494 2,396	2325 148,438 8,184 418,389 77 18,589 8,184 418,389 24,68 28,576 3,077 18,529 2,179 18,151 4,606 100,449	6,336 2.35 108,483 8,184 413,885 6,696 7.043 8.577 13,093
	413,393 326 13,623 105,484	24,577 868 868 87,184 413,593 83,977 13,623 4606 100,484	996 24,077 868 148,488 418,888 488 488 488 85,184 418,888 188 188,181 18,632 18	2355 148,438 8,164 418,388 7,043 848 8,577 18,688 8,577 8,87 18,632 8,577 18,632 8,77 18,632 8,77 18,632	6.328 £2335 148,438 £4,577 868 888 696 7,043 888 7,043 488 8,184 413,383 7,143 8,184
	413,583 326 13,632 105,484	8, 184 418, 383 4, 838 326 3, 977 13, 632 4, 605 105, 484 9, 896	145,483 8,194 413,893 463 4,898 135 85,579 13,629 138,181 4,606 105,494 200 2,896 105,494	2325 148,488 8,184 413,388 77,043 468 85,478 8,977 13,628 8,179 13,628 8,179 13,628	6,536 2,5043 18,184 8,184 413,388 6,696 7,043 8,88 2,677 13,625 6,574 2,179 186,151 4,606 100,494 6,606 6,606 6,606 6,606 6,606 6,606 6,606 6,606 6,606 6,606 6,606 6,606 6,606 6,606 6,
	326 13,632 105,484	4,838 326 8,977 13,632 4,605 100,484 9,806 77	462 4,888 326 35,778 13,632 138,151 4,605 105,444 20 2,396 77	7,043 482 4,838 326 24,68 33,079 3,977 13,632 2,179 138,181 4,605 105,484	14,930 2,468 80,678 4,888 236 86,874 13,628 100,444 10
	18,622 105,484	8,977 18,622 4,605 105,484 77	35,578 3,977 13,632 138,151 4,605 105,484 200 2,386 77	2,468 35,578 3,977 13,632 2,179 138,151 4,605 105,484	14,930 2,468 8,678 3,977 13,632 6,577 13,632 7,77 13,632 7,57 13,6
	105,484	4,605 105,484	138,151 4,605 105,484 2,396 77	2,179 138,151 4,605 105,484	65,874 2,179 138,151 4,605 105,484 77 77
		2.206 1 77	200 2,896 77		77 200 2,396 77
_	-	- : - : - : - :		2,452 200 2,396 77	
	3	7,358	1,858	5,675 - 6,066	6,675 - 7,858 - 6,068
98.8	16,075 9,849	6,090 16,075 9,849	8,883 6,090 18,075 9,849	1,149 8,883 6,090 18,075 9,849	2,633 1,149 8,833 6,090 18,075 9,849
20,64	159,882 80,644	8,263 159,882 30,644	25, 423 8, 263 159,882 30,644	8,974 25,423 8,263 159,882 30,644	26,497 8,974 25,423 8,269 159,882 30,644
8,646,116	8,728,693 8,646,116	3,013,869 3,728,693 3,646,116	4,486,862 3,013,869 3,728,698 3,646,116	3 3,318,112 4,486,862 3,013,369 3,723,693 3,646,116	3 3,318,112 4,486,862 3,013,369 3,723,693 3,646,116
453,552	453,552 453,552	416,532 453,552 453,552	555,876 416,582 453,562 463,568	983,361 555,376 416,532 453,562 453,563	983,361 555,376 416,532 453,562 453,563
_	389 6,540	2,838 889 6,540	507 2,838 389 6,540	1,863 607 9,838 889 6,540	1,863 607 9,838 889 6,540
	;				
25	- 12 - 08 - 26 - 2	12 08 36 EI	13 12 8 84 80 11	20 13 19 8 84 80 11	pieces 20 12 12 8 84 20 11
1	1	1	1 1		
27.681	18.968 87.681	10.609 1 18.968 27.681	5.195 10.800 1 18.968 ST. 681 4.801	94.507 6.195 10.609 1 18.968 97.681 4.201	13 067 6.194 10.408 13.968 97.631 4.301
27,681	12,968 27,681 4,301	10,609 12,963 27,681 4,301	6,195 10,609 12,963 27,681 4,201	25,697 6,195 10,609 15,908 27,681 4,801	18,061 25,697 6,195 10,609 13,603 27,681 4,801
3 1.618 5.883	7,006 1,618 5,889	2,683 7,006 1,518 5,883	14,634 2,689 7,006 1,518 5,889	5,984 14,634 2,688 7,006 1,618 5,889	26.147 5.984 14.684 2.689 7.006 1.618 5.883
1,618	7,006	2,688 7,006 1,618	14,684 2,688 7,006 1,618	5,484 14,684 1,006 1,006 1,518	26,147 5,984 14,684 2,688 7,006 1,518
3,681	18,968 27,681 7,006 1,518	10,609 13,968 57,681 7,006 1,518	6, 195 10, 409 13, 963 27, 681 14, 18 17, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7	25,697 6,196 10,609 13,963 27,681 5,686 1,618 1,618 1,618 1,618	18,061 24,697 6,195 10,609 13,968 27,681 26,147 5,594 3,683 7,006 1,518
	18,968	10,609 18,968	6,155 10,609 13,963 14,654 17,006 17,006	18,061 82,697 6,195 10,009 13,988 87,681 8,068 7,088 1,018 10,008 1,018	18,001 85,657 6,195 10,609 13,688 7,006 7,006 13,006 13,006
~~ ~ ~	463,662 389 389 18,968 7,006	405,652 4,836 3,836 3,836 10,609 13,963 13,963	605,376 416,533 463,562 869 869 869 869 869 869 869 869 869 869	253.361 655,876 416,853 4654,863 1,863 1,265 1,565 1,655,89 13,669 13,669 13,669 15,896 15,89	253.361 655,876 416,853 4654,863 1,863 1,265 1,565 1,655,89 13,669 13,669 13,669 15,896 15,89
16,075 3,728,693 463,562 463,562 389 389 13,963 7,006		2,012,369 416,369 416,369 1,013,369 1,039 1,039	8,833 4,435,600 4,435,600 5,53,716 13 13 14,634 14,634 14,634 14,634 14,634 14,634 14,634	1,119 8,833 6,600 1,131 8,833 8,433 8,131 8,433 8,131 8,433 8,131	\$ 653 1,149 8,833 6,090 1,525 1,410 8,833 1,410 8,833 1,410 8,833 1,410 8,833 1,410 8,833 1,410 8,833 1,410 8,833 1,410 8,833 1,410 8,833 1,410 8,833 1,410 8,833 1,410 8,833 1,410 8,833 1,410
	3,018,869 416,638 416,638 9,638 10,609 10,609		26, 435 26, 435 4,456, 663 5,55, 576 507 12 14, 684	1,119 4,426,423 1,5316,119 4,456,663 263,361 6,54,23 1,663 601 1,663 601 1,263 601 1,263 601 1,263 603 1,263 603	26,407 4,576,706 30,820 30,

Owing to official corrections, made yearly, the totals, do not, in all instances, exactly correspond.

CINNAMON.—In 1830 the duty was 6d per lb. on British grown and 1s on Foreign, and the consumption was 40,588 lbs. In 1841 it had declined to 15,625 lbs., but the duty was then reduced 50 per cent., and in 1852 the consumption had recovered to 36,325 lbs. In the following year the duty was lowered to 2d per lb. alike on British and Foreign, and the consumption in 1859 was 50,789 lbs.

1860 the duty was wholly removed.

CLEARING HOUSE.—In New York a daily clearing house was established by the bankers in October, 1853, and one at Boston in March, 1856. The total sums cleared are nearly 4 millions sterling per day The average sum total cleared in 1854 and 1855 was about 1150 millions sterling, by balances of 60 millions. In the Second Report of the Committee on Banks of Issue, a return was given of the business of the London Clearing House in 1839, the daily clearings being stated at about 3 millions sterling, or 11 million per day less than in 1810, and 1 million per day less than the New York clearing of 1854-1856. There must be some mistake in this, for the transactions in the twenty years since must have increased proportionately with the increase of business in the metropolis.

Beside the Bankers' clearing house, the Railway Companies established a clearing house in London in 1842 to facilitate the interchange of their busines transactions. In 1852 the aggregate annual amount of the accounts examined and settled in the Railway Clearing House was about £3,000,000, which was arranged by a transfer of balances amounting to under £400,000. Besides settling the accounts and apportioning the receipts of the through traffic, it has confided to it by Act of Parliament, legal powers, and the duty of protecting the interests of the associated Companies, in so far as the transactions in which they have a reciprocal interest are concerned, and of securing to each Company

an adequate remuneration for the use they respectively make of each other's stock of carriages, waggons, and sheets or tarpaulins.

CLOCKS.—The wood and musical clocks made in the Black Forest, and the Grand Duchy of Baden, are known and appreciated as much for their cheapness as for their construction in every country where clocks are made use of. In 1855 this trade employed no less than 1570 master-workmen, and three times that number of common workmen. The total annual value of the clocks sold exceeds £1,000,000. This manufacture has, however, of late years been transferred by degrees from the mountains of Wurtemberg to the plains of America by the numerous emigrants annually leaving Germany. Formerly the Americans used to send a large number of wooden clocks to England for exportation to Australia and other colonies; but now the Germans there are able not only to beat them out of the field, but even to compete successfully with their own German countrymen in the home market of their father-land.

The large and rapidly increasing manufacture of this article in America is evident from the following authentic statistics of the trade. In Connecticut there are 7 manufactories, employing 1300 persons, and producing annually 800,000 wooden clocks; in Bristol 14 manufactories with 400 persons, making 200,000 clocks. Altogether there are in 7 places, 32 manufactories, employing 2500

workmen, and producing annually 1,617,000 wooden clocks.

The rates of duty levied on clocks was fixed by the tariff of June 1853, as follows: under 5s value 4s per dozen; under 12s 6d 8s per dozen; under 13. 2s each; under £10. 4s each; above £10. 10s each. In 1858, 228,417 clocks under 12s 6d value, and 19,211 above that value were imported, nearly all of

which, except 5000 or 6000 were retained for home use.

CLOVES.—In 1830 the duty was 2s on British, and 3s on Foreign, and the consumption was 60,111 lbs. In 1835 it had increased to 93,583 lbs. and in 1836 the duty was lowered to 6d per pound for all descriptions. In 1850 the consumption had increased to 175,287 lbs. and in the following year there was a further reduction of duty to 2d per pound. In 1859 the consumption in the United Kingdom was 272,823 lbs.

COAL. - The amount annually raised in this country is about sixty-five millions of tons, of which three quarters of a million is consumed by our steam marine, and a similar quantity by the transatlantic steamers; four millions for COA 63 COA

domestic and other purposes in London alone, eleven millions in the mills of Manchester and neighbourhood, one million in the salt works, ten millions in gas making, about ten millions more in the provinces, and about twenty-two millions are either wasted or not accounted for. The Newcastle coal-field, the Golconda of England, the black diamond mine out of which our fortunes are dug, yields about sixteen millions of tons annually, and Mr. Nicholas Wood, of Hetton, the prince of English coal viewers, computes that this alone would take 1500 years to exhaust. The thickness of the beds of coal at Liege is about 55 feet; those of Staffordshire, 151 feet; those of Ruhr, 134 feet. The export of coal from England reached in 1859, 6,979,800 tons. It is estimated that this country alone could supply the demands of all Europe for 4000 years to come. To give an idea of the dynamic force contained in these enormous masses of coal, it has been estimated that three tons of the material are equivalent to the labour of a man throughout his whole life. In a paper read by Mr. Birch before the Royal Society, it is stated, "That the human labourer exerting his strength upon a treadmill, can raise his own weight, say 150 lbs., through a height of 10,000 feet per day, or something less than two miles vertically." The mechanical virtue of fuel is best estimated by ascertaining the number of pounds which a given quantity, for instance one bushel, will raise to a given height, say one foot, against gravity. In the steam engine this is called the duty of the fuel. Now the present maximum duty of one bushel of good coal, in the improved Cornish steam-engine, is equivalent to 100,000,000 lbs. lifted through one foot, but it has been made to raise 125,000,000 feet; now as there are 84 lbs. in one bushel, this divisor gives one pound, 1,500,000 feet, just the result of a man's toil for one day on the treadmill. Thus a pound of coal is really worth a day's wages. If we estimate a life-time of hard work at twenty years of 300 working days each, we have for a man's total dynamic effect 6000 days, which in coal is represented by the amazingly small amount of three tons. The actual annual expenditure of power in England by coal is represented by the equivalent of 66,000,000 of able-bodied labourers, supposing only 10,000,000 to be used in the production of steam, but the real amount is six-and-a-half-times what is here assumed, if the quantity used as fuel be included. It is interesting to know that, with the exception of 7,000,000 tons of coal exported to foreign countries, the whole of the coal raised is consumed in this country, and that, setting aside the proportion employed in our domestic economies, it goes to the production of that gigantic creative power which so distinguishes manufacturing England.

The coal power of this country, as compared with the Continental States, connected as it immediately is with our manufacturing capabilities and our commercial relations forms an important section of these statistics.

The annual production of—	Ρ.						English Ton
France is	-	-	-	_	-	-	5,490,702
Belgium	-	-	-	•	-	-	8,285,432
Austria (coal and lignite))	•	-	-	-	-	1,162,950
Prussia (coal and peat)		•	-	-	-	•	7,454,624
Spain (coal and peat)		-	•	•	-	•	144,293

Total produce of the Continent - - 22,538,00

The British Islands produce of coal, in every respect superior to that obtained in any foreign State, with the exception of a portion of the Belgian coalfield, is three times this quantity, or, as before stated, 65,000,000 tons.

COAL FIELDS.—The following list of the principal coal-fields in the

COAL FIELDS.—The following list of the principal coal-fields in the United Kingdom, with the areas of each in square miles, has been computed from the Ordnance and other geological maps, and corrected as far as possible by inquiries and personal knowledge:—

ENGLAND AND WALES.

Districts.		Sq. Miles			Sq. Miles.
Northumberland and Durham	-		Shropshire	•	• ⁷⁵
Cumberland (West)	-		Staffordshire	-	- 802
	-		Warwickshire	•	- 105
Lancashire	-		Forest of Dean	-	- 35
Cheshire	-		Gloucester and Somerset	-	- 48
North Wales	-	+ 100 l	South Wales	•	- 10451 4068

SCOTLAND.

This coal-field on the wes										o Irvi -				-	1700
					Tota	l Grea	t Britain -		-	-	-	-	-	-	5768
						IREL									
The Shannon Kilkenny, South	•	•	-	-	-	1498	Stigo	•	•	-	•	-	•	807	
Kilkenny, South	-	-	-	-	-	126	Dungany	lon	-	-	-	-	-	32	
North	-	•	•	-	-	205	Ramoan		-	-	•	-	-		-2227
Dundalk -	-	•	-												
					Total	for th	e United I	King	lom	-	-		-		7995
									-						

In Great Britain there are about 1520 collieries. The largest of these are in the counties of Northumberland, Durham, Derby, and Leicestershire. The works in the first two frequently extend over an area of from 400 to 500 acres. The excavated galleries in Killingworth Colliery, Northumberland, extend about 160 miles, though the distance from one extreme point to another is not more than 5 miles. The best guide, in this respect, is the length of the air-courses; and in the Hetton Colliery, Durham, the air has to travel 72 miles through the works. It does this, however, through 17 different galleries, the average distance of which is only 41 miles. The Haswell Colliery, Durham, has 35 miles of galleries in work, and the air travels through ten ways, of the average distance of 31 miles each. Seaton Delaval, (Northumberland), has five air-courses, of 1 mile each.
In 1829, Mr. Hugh Taylor, after carefully examining the areas of our coal

fields, and computing the quantity of workable coal in each, named 1727 years as the possible period requisite to exhaust the coal fields of Durham and Northumberland. Dr. Buckland regarded Mr. Hugh Taylor's estimate as a very exaggerated one, and was disposed to give 400 years as the probable duration of these fields; at the same time stating that his estimate was "vague and conjectural." But it must not be forgotten that Mr. Hugh Taylor then estimated the coal consumption of the Northern district at 3,960,000 tons per annum, and that of the United Kingdom at 15,580,000 tons; Mr. Brandling, at the same time,

estimating it at only 12,000,000 tons.

Mr. G. C. Greenwell estimated, in 1846, the total quantity of merchantable coals remaining in the Northumberland and Durham coal fields, in an accessible state, as 1,251,232,504 Newcastle chaldrons, or 3,315,766,135 tons. "If," says that coal engineer, "the annual demand should be equal to 10,000,000 tons, or 3,773,515 Newcastle chaldrons, it will be exhausted in 331 years." time, the rapidly increasing demand was the subject of especial remark in Observations addressed to the Coalonners, by Mr. T. John Taylor.

Mr. Thomas Y. Hale assumed the total quantity of coal remaining in the Great Northern coal field, in 1853, at 5,575,432,173 tons. "This, divided by 14,000,000 tons annually excavated for sales and pit consumption, gives 365 years; but if the demand increased to 20,000,000 tons the duration of the coal

field would be only 256 years."

Now, according to Mr. Robert Hunt's Mineral Statistics, the exhaustion of the Northumberland and Durham coal fields for three succeeding years has been going on at the following rate:—In 1856, 15,492,969 tons; 1857, 15,826,525 tons; 1858, 15,853,484 tons; so that at the present rate, assuming the above to represent the facts correctly, the duration of the coal in this district would be about 348 years.

The preceding remarks have reference only to the so-called Newcastle coal field, but from these an approximate estimate may be made. The entire area of the "coal measures" of the United Kingdom has been assumed, with a fair approach to correctness, to be 11,859 square miles, or 7,589,760 acres. The area of the "coal beds" is considerably less than this. We may, however, regard the Durham and Northumberland coal fields as being about one-eighth of the entire area from which we draw our fossil fuel.

Mineral Statistics, already quoted, shows the total produce of the United Kingdom in 1856 to have been 66,645,450 tons of coals; in 1857 65,394,707 tons; in 1858, 65,008,649 tons; therefore we derive nearly one-fourth of our coals from the Newcastle district, three-fourths are, and will continue to be obtained from the remaining seven-eighths of the British coal fields. Now, after a careful examination of the whole question—considering the rapid exhaustion of the South Staffordshire coal basin, and the

enormous drain upon the Yorkshire and Lancashire fields—we are convinced that there exists in the United Kingdom unworked, but workable, coal sufficient to meet a demand of 70,000,000 tons per annum for 700 years.

COCCULUS INDICUS.—The imports of this drug are rather considerable. In 1854 there was imported into London 4093 bags and packages. In 1855, 827 bags; in 1856, 833; and in 1857, 1958. According to the Board of Trade returns, the total imports were 549 cwts. in 1857, and 868 cwts. in 1858; but only a small quantity was taken for consumption.

only a small quantity was taken for consumption.

COCHINEAL.—The imports in the five years ending with 1858, have averaged 23,000 cwts. Of the 22,237 cwts. valued at £468,587 imported in 1858, 5132 cwts. came from France, the Canary Islands, 6566 from Honduras, 2805 from Central America, 2334 from New Granada, and 3006 from France. Cochineal has been admitted free of duty since 1st March, 1845.

The total exports from Guatemala in the last eight years were as follows:-

1851.	•	-	٠.	1,248,852 Ibs. [1855.	•		1,567,º04 lbs.
1852.	•	•		574,938 ,	1856.			1,824,966
1853.				317,077 ,	1857.			1,481,088
1854.	•	•		2,623,420 ,,	1858.	•	•	2,012,425 ,,

COCOANUTS AND COCOANUT OIL.—Cocoanut culture is largely attended to in Ceylon, and the resulting products of oil and coir have greatly increased of late years. The exports of coconnut oil from Ceylon were in 1855, 1,234,081 gallons; in 1856, 1,096,473; and in 1857, 1,767,413 gallons.

The whole value of the cocoanut products shipped from Ceylon in 1857 were

```
Nuts
                            . no. 1,420,856 value £3,717
Coir rope
                            . cwts. 18,881
                                                   13,984
                                              "
                                     31,652
                                                   21,364
Coir yarn
                                              ,, ·
                               ,,
Copperah or dried cocoanut
                                     20,381
                           .
                                                   12,143
                           . gals. 1,767,413
                                                  223,254
```

Making an aggregate export value of £274,462 from the cocoanut groves of the island, exclusive of any use of the wood, leaves, and of local consumption of nuts, oil, &c. Although palm oil, from the large quantity which now comes into commerce, has supplanted to a great extent cocoanut oil, the imports of the latter were in 1858, 197,788 cwts., valued at £375,840. There were also imported 2,500,000 cocoanuts from various quarters.

COD.—The following is a statement of the British caught dried cod fish exported annually from St. John's, Newfoundland :-

						Quintais.	l						Quintals.
1838	-	•	-	-	-	724,515	1848	-	-	-	-	-	928,366
1839	-	-	-	-	-	865,377	1849	-	-	-	-	-	1,175,167
1840	-	-	-	-	-	915,795	1850	-	-	-	-	-	1,089,149
1841	-	-	•	•	-	1,009,725	1851	-	-	-	-	-	1,017,674
1842	-	-		-	•	1,007,980	1852	-	-	-	-	-	972,021
1843	-	-	-	-	-	936,202	1853	-	-	-	•	-	922,718
1844	-	-	-	-	-	852,162	1854	-	-	-	-	-	774.117
1845	-	-	-	-	-	1,000,338	1855	•	-	-	-	-	831,986
1846	-	-	-	-	-		1856	-	-	-	-	-	1.892.322
1847	_	_	_	_	_	837.973	1837	-	-	-	-	_	1.039.059

In 1848 the average take of cod fish by the French on the Newfoundland shores was stated at about 1,500,000 quintals Taking the cod fishery alone the following was an estimate given by Mr. Matthew Warren in a lecture delivered before the Mechanics' Institution, St. John's, in 1857. The fish are valued at 10s the quintal, and the oil at £30 per tun:-

66 TAKEN BY THE AMERICANS.

							Value.
1,500,000 quintals of cod fis	D.	-	-	•	-	•	£750,000
1,500,000 quintals of cod fis 4,500 tuns of cod oil	-	-	-	-	•	-	135,000
BY	TH	B FI	RENC	H.			
1,600,000 quintals of fish	-		-	-		-	800,000
4,000 tuns of oil -	-	•	-	•	-	•	120,000
BY THE	BRI	TISE	EX	POR'	tED.		
1,000,000 quintals of fish 4,000 tuns of oil -	-	-	-	-	-	-	500,000
4,000 tuns of oil -	•	-	-	•	-	-	120,600
LABRADO	RE	BRIT	IBH :	F18U	ING.		
300,000 quintals cod fish	-	•	-	•	-	-	150,600

£2,575,000

Making a total of 4,400,000 cwts. of cod fish caught annually on the shores and banks belonging to Newfoundland, worth, with the oil, more than £2,500,000.; and this is exclusive of the seal, salmon, and herring fisheries.

The following shows the proportion of cod fish exported from St. John's, Newfoundland, to various countries, in 1852, in quintals or cwts. :-

							England						
Spain -	-	-	-	-	•	99,097	Scotland	-	-	-	-	•	7,008
Italy	-	-	•	-	-	82,827	Ireland	-	-	-	-	-	5,014
British W	est I	ndles	•	-	-	121,176	Other par	te	-	-	-	-	98,576
Brazils	-	-	-	•	-	95,702	i -					-	
British Av	nerk	198	_	_	_	22,233	•						629,496

In the report of the British Fisheries Commissioners, for 1858, a detailed aletract is given of the total quantity of cod, ling, and hake cured from the 10th of October, 1820, when the system of encouragement and improvement of the cod fishery commenced, to the year 1858; and from this we are enabled to extract some figures calculated to show the extent of the fisheries:-

		Quantity Cu	red Dry.	Pickled.	Exported Dried.
		Cw	ts.	Barrels.	Cwts.
In 1821	•	- 50,2	35	4,920	19,578
In 1831	-	50,2	98	8,780	20,168
In 1841	•	- 76,8	49	7,038	25,293
In 1851	•	- 98,9	03	6,588	24,154
In 1858	•	- 95,5	96	4,584	3 2,152

The branding and punching of cod and ling was discontinued on the 5th Jan. 1850, as well as the collection of returns for England, the duties of the Commissioners being now confined to Scotland and the Isle of Man. The bounty up to the 5th April, 1830, was 4s per cwt. for fish cured dried, and 2s 6d per barrel for fish cured in pickle, taken by the crews of vessels or boats not on the tonnage nsh cured in pickie, taken by the crews or vessels or boas not on the tonnage bounty, while the bounty for vessels licensed for the cod and ling fisheries on the tonnage bounty was 50s per ton for tonnage and cargo, up to the 5th July, 1828; 45s from thence to the 5th July, 1827; 40s to the 5th July, 1828; and 35s to the 5th April, 1830, when the bounties ceased altogether, and have not since been renewed. There is no means of separating fishing boats and men, so as to know how many are specially engaged in the cod fishery.

On that part of the coast of Ireland connected with Lough Foyle for nine months in the year the trade continues in cod. The cod fishing commences in

months in the year the trade continues in cod. The cod fishing commences in October; they move out, and, as the weather settles in spring, the fishermen follow them eight miles out, and finally twenty miles out to Hawden Bank. From the 1st Oct. to the 1st May about 150 boxes of cod are shipped weekly by steamer to Liverpool, and from May to July about 90 boxes per week; total to Liverpool during the season, 5220 boxes; to Glasgow double that quantity: total, 15,660 boxes, each box contains 14 fish. The fishermen generally contract with the buyers at 7s per dozen of fourteen fish all the year round. Thus the amount received by the fishermen is £5481 annually for cod fish.

The buyers pay 3s freight and 6d per box for packing.

COD LIVER OIL. The oil obtained from the livers of the common cod and various other allied species is now a very important article of commerce.

The other species from which this oil is procured are the dorse (Morrhua callarius), which yields a white description of oil, the coal fish (Morlangus carbonarius), the burbot (Lota vulgaris), the ling (Lota molva), and the torsk

(Brosmius vulgaris).

Most of the cod-oil met with in the London market is the produce of the bank-fisheries of Newfoundland, where, according to Pennant (Arctic Zoology, vol. 3), it used to be thus procured:—"They take half a tub, and boring a hole through the bottom, press hard down into it a layer of spruce-boughs, upon which they place the livers, and expose the whole apparatus to as sunny a place as possible. As the livers corrupt the oil runs from them, and, straining itself through the spruce-boughs, is caught in a vessel set under the hole in the tub's bottom." At Newhaven, near Edinburgh, the fishermen simply boil the livers in an iron pot, and then filter the oil through a towel containing a little sand.

The quantity of oil produced from each quintal of cod is supposed to pay for the labour of splitting and the salt used in curing. It is not easy to obtain pure cod liver oil. That which comes from Rouen, on the coast of Normandy, is obtained from the boiled livers of the ray fish (Raia bates and R. clavata). A variety from Norway is procured from the roes and entrails of the Gadus species boiled together; and some sent from Senegal to France is said to be obtained by roasting the entrails of a species of crab, C. ruricola. So important has this product become, that Messrs, Langton, Brothers, and Scott, of Upper Thames Street, London, have established a special manufacture of cod liver oil at Newfoundland, under the management of a well-known extractor. It is now purified, and rendered beautifully clear. 31,038 gallons of oil were exported from the Gaspe fisheries on the St. Lawrence

in 1848, and 50,794 gallons in 1849.

Newfoundland is the great manufactory of "cod liver oil." Large quantities of this valuable medical oil being made in almost every section of the colony, and manufactures have been set up, and much capital invested in the undertaking. The liver of the cod fish, in years past, was but little valued in the fishing-rooms of the colony. But no sooner had Mr. Fox, an English chemist, arrived with apparatus for rendering the liver, and made known its valuable qualities, than it rose in price, and was much cared for by those in charge of the oil-tubs and fishing-rooms. Mr. Fox also made known the value of the heads of the fish, which had been formerly thrown into the sea, or on the manufactured large quantities of superior isinglass; and from the bones of the head remaining, after the chemical process which had extracted the isinglass, he made (with the addition of other substances) glue; thus turning what had for a hundred years been thrown saide as offal to valuable account. When the great cod liver oil mania commenced, the discovery was looked upon as a new one; but it appears from inquiries into the subject, that the discovery was made, half a century ago, by Monsieur L'Artone, a French chemist, "who extracted oil from the liver of the cod-fish, by which means he was enabled to perform many miraculous cures in cases of consumption." Newfoundland, perhape, possesses greater facilities for the manufacture of this oil than any other portion of the world.

The method of extracting oil from the cod-livers by steam is employed in one establishment at St. John's, Newfoundland, producing so very superior an article, that a medal was awarded for it at the Great Exhibition in 1851. There is also

an establishment at Blanc Sablon for the same purpose.

In 1845 but 3527 gallons of cod-oil were exported from Newfoundland. In 1857 it had risen to 496,833 gallons, besides 327 tuns and 150 gallons of manufactured or refined cod liver oil.

In the north of Germany cod liver oil was in use nearly a quarter of a century ago as an article of established reputation in their Materia Medica; and a good account of it is to be found in Rieke's Neuern Arzneimittel, published in 1837.

The common and most impure specimens of the oil are much used in the leather manufactories of Holland and the North of Germany. It is supposed to possess the power of dissolving and removing the gelatinous matter of the hide.

As a popular remedy in cases of scrofula, rheumatism, and consumption, it has long enjoyed a high reputation. The dose for an adult is from one to three table-spoonfuls three times a day; for children the same number of tea-spoonfuls. In the preparation of the oil putrefaction and charring should be especially avoided.

In the preparation of the oil putrefaction and charring should be especially avoided.

Dr. Bennett has published a treatise on cod liver oil, in which he alludes to four distinct varieties, the white, yellow, red, and brown. The classification is, however, arbitrary, as the difference appears to depend upon the degree of care used in preparing it, the heat and pressure employed, and the comparative freedom from impurities.

COFFEE. Some interesting facts come out in comparing the quantities consumed in different countries. Among European States, Belgium stands highest, and England lowest. In Belgium, the consumption in 1855 was 44,409,860 lbs., which with a population of 4,426,202, gives about 10 lbs. for each individual, while chicory being home grown and untaxed, is also used in prodigious quantities. In Denmark, with a population of 1,400,000, the consumption in 1852 was 6,899,158 lbs., or nearly 5 lbs. per head, besides one-third as much chicory in addition. The States of the German Union, numbering 32,559,173 inhabitants, consumed in 1855 1225 million pounds, or close upon 4 lbs. for each taken on an accessor but this includes the property and other coffee support that the includes the property and other coffee support the European in average, but this includes chicory and other coffee substitutes. In France in 1857 the consumption was 62,000,000 lbs. to a population of 36,000,000, or not quite 2 lbs. per head, but the consumption of chicory is also very large. In the United States the consumption averages about 200,000,000 lbs. to a population of 27 millions, or nearly 8 lbs. per head. Coming now to our own country, the states is the first backets and the consumption has constant to the consumption has constant to the consumption has constant to the consumption has constant to the consumption has constant to the consumption has constant to the consumption has constant to the consumption has constant to the consumption has constant to the consumption has constant to the consumption has constant to the consumption of the consumption has constant to the consumption of the Great Britain, we find the consumption has scarcely varied for many years at 1 lbs. per head per annum. There is, however, a growing taste for tea in this country which has been continuous, it being found that in use one pound of tea goes as far as three of coffee. In the United States there is no duty on either tes or coffee. The Americans consume about four times as much coffee as tes. Taking tea and coffee together, their average is about 8 pounds, while ours is under 5 pounds. The consumption of the southern portion of the Union is and always has been much greater in proportion to the population than that of the northern and eastern States, owing to the fact that the bulk of the residents of that section of the country use coffee as a beverage both at the morning and evening meal, and indeed not a small part consider the coffee urn an indispensable accessory even to the dining table.

CONSUMPTION of COFFEE in GREAT BRITAIN.

Years.	Population.	Consumption.	Rate of Duty on B. P.	Consumption per Head.	Tax per Head.
1841 1851 1859	18,687,537 21,000,000 23,000,000	Lbs. 28,870,857 82,504,548 84,492,947	a. d. 0 6 0 8 0 8	Lbs. 1.515 1.647 1.498	2. d. 0 101 0 5 0 41

The rapid decline in the consumption of coffee, which fell six millions of pounds in 1850 as compared with 1847, has of late years been somewhat recovered by the exertions made by the Ceylon coffee planters to prevent the fraudound and coffee obtained more than cent per cent profit.

ground coffee obtained more than cent per cent profit.

The sources of supply have very much altered in the last quarter of a century. Of the 65,353,029 lbs. imported in 1859, 42,364,978 lbs. came from Ceylon, 9,343,923 lbs. from the West Indian and other British possessions, 4,700,000 lbs. fron Brazil, and the same quantity from Central America, and 4,253,000 from other countries.

DESTRIBUTION of the Corpen Crop of Ceylon for Four Years to 30th September in each Year.

		<u>:</u> :					
1	Placea				1856-7. Plan. and Native.	1857-8, Plan. and Native.	1858-9. Plan. and Native.
London				Cwts.	Cwts. 284,822	Cwts. 881,460	Cwts. 402,405
Liverpool	•	•	•	884,380		881,400	
Gibraltar	•	•	•	4,186	18,938	11,320	10,625
France	•	•	•	5,657		7,575	
	•	•	• 1	88,878	171,563	47,874	110,640
Falmouth	•	•	• ,		133	20,449	18,638
Rotterdam	•	•	•	• • • •	122.	83,075	8,205
United States	•	•	•	16,503	5,000	2.7.7.	13,582
Australia	•	•	•	6,616	83,227	14,229	11,881
Mauritius	•	•	•	8,837	1,794	6,702	8,247
Maulmein	:	•				64	
Belle Isle	•	•	•	12,620		• • •	
Pamboeuf		•		5,516			
. Amsterdam	•	•		12,014	21,887		7,043
Genoa				4.455			
Penang	•			1.527			
Monte Video					172		
Antwerp					7.842		
Bremen				9	5,535		
Trieste			- 1			6,950	
Mediterranear	ı -					8,781	
Calcutta	-		- 1			1,250	1,008
Hamburg	-		- 1		!!!	1,129	
Cherbourg			اي		:::	6,906	
Lost in Sibella		:	•	• • • • • • • • • • • • • • • • • • • •	:::	9,885	l
Bombay		-	•		1 111 1	5,000	258
Akyab	•	•	:	ı		• • • • • • • • • • • • • • • • • • • •	. 804
Madras	•	•	•		1 ::: 1		1,912
Egypt	:	•	•		I ::: I		. 1,560
	•	•	•				
l	Total	•	•	446,198	545,918	552,648	584,552

The following table carries down the information given in the body of the work respecting coffee to the present time. Account of the quantities of coffee imported, exported, and consumed in the United Kingdom; with the rates of import duty, revenue arising therefrom, and price of fine West India coffee, in bond, in July of each year named:—

Years.	Imported.	Exported.	Duty per lb.	Revenue.	Price per Cwt.
	Cwk	Cwt		- R	
1840	70,250,766	12,707,414	B. Pos. 6d per lb.	921,551	
1841	48,317,762			887,747	ł
1842	41,444,414			768,886	1
1843	88,942,469		From July 9, 1842 B.P. 41d lb.	697.376	4
1844	46,523,188			681,616	l .
1845		19,220,621		717,871	ł
1846	51.813.651			756,838	ł
1847	55,354,044			746,486	ł
1848	57,053,450			709,632	20 to 110
1849	63,815,787			642,520	90 100
1850		12,169,752		565,659	80 92
1851	1 ' ' 1	22,712,859	(Adam to A mult 1051 hath)	444,670	36 80
1852	54,935,510	12,937,552	Kiln dried, 3d, ground 6d.	438,076	85 75
1853	55,634,783	26,656,892	(After 4 June, 1853, both)	463,666	50 90
1854	66,500,358	32,589,111		468,392	50 86
1855	64,061,479	28,766,528	After 21 April, 1855, both	547,887	47 90
1856		27,602,836		586,767	48 85
1857	48,892,726	15,782,710	(After 6 April, 1857, both)	456,805	69
1858	60,697,264	28,761,314	kinds, 8d raw, dried or	442,120	66
1859	65,358,329	29,580,779	ground 4d.	431,361	l

The gross revenue is given subsequent to 1851; the net revenue in previous year.

The imports and consumption of coffee in France have been:-

IN KILOGRAMMES OF TWO AND ONE-FIFTH LBS.

	lmports.	COMSUMPTION.		
1848	27,456,298	14,962,884		
1849	81,697,746	18,150,865		
1850	22,672,043	15,868,585		
1851	81,990,450	18,659,248		
1852	84,403,195	21,573,323		
1858	27,783,261	19,946,762		
1854	84,977,083	21,720,009		
1855	84,915,120	26,740,598		
1856	40,090,489	23,222,426		
1857	58,650,474	27,997,432		

The imports of coffee into the United States have been as follows:-

				Quantity. lbs.	Value. Dollars.	Taken for Consumption. lbs.
1848		-		150,559,138	8,199,129	
1849	-	_	!	165,834,700	9,058,352	1
1850		-	_!	144,986 895	11,215,076	1
1851	-		4	216,043,870	••	208,520,910
1852	_	•	7	205,542,855	••	204,991,595
1858	_	-	1	193,112,300	15,525,954	175,687,790
1854		-	_1	182,470,853	••	179,481,983
1855	-	_	٦	238,214,533	••	216,438,375
1856		-	Ţ	235,865,268	••	165,974,720
1857	_	_	ال	240,676,227	••	174,769,920
1858	_	-		189,211,300	18,341,081	1

The following figures show the production and consumption of coffee, in the principal countries:—

PRODUCTION IN MILLIONS OF POUNDS.

	1832.	1841.	1845.	1850.	1855.
Brazil Java Cuba and Porto Rico St. Domingo British West Indies Sumatra, Mocha, Bourbon, &c.	- 80,6 - 40,3 - 56,0 - 44,8 - 24,6 - 44,8	156,8 1,190 56,0 83,6 18,4 94,6	180 120 25 20 12 25	302 140 30 30 16 20	320 125 20 40 5 20 62
British India and Ceylon - French and Dutch West Indies La Guayra and Costa Rica -	6,7 17,9 18,4 829,1	94,6 6,7 6,7 22,4 482,2	10 6 20 428	82 14 29 610	62 3 15

CONSUMPTION OF THE CHIEF COUNTRIES IN MILLIONS OF POUNDS.

	1832.	1841.	1845.	1850.	1855.
Holland and Netherlands Germany and North Europe - France and South Europe Great Britain United States & British N. America	90,7 71,7 78,4 22,9 82,0	112,0 89,6 89,6 27,2 117,0	125,0 100,0 95,0 84,8 135,0	108,0 175,0 105,0 41,1 140,0	140,0 170,0 110,0 35,7 210,5
	845,7	435,4	489,3	559,1	666,2

COIR.—The imports of coir rope, twine, and strands, chiefly from Ceylon and India was, in 1858, 81,138 cwts., valued at £103,880, against 75,510 cwts., valued at £101,939 in 1857. Coir yarn is much used for cocca-nut matting, an article largely manufactured for door-mats, covering hall floors, public rooms, &c.

COLONY.—Since this work was published, the following changes have taken place in British colonies:—In North America, Great Britain has extended her colonial possessions by taking over the Red River Settlement and Vancouver Island from the Hudson's Bay Company, and founded a new colony in British Columbia, in the North-west territory. In Africa, the island of Fernando Po has been given back to Spain; a new colony has been formed at Natal, and the British possessions in Northern Africa further extended by the occupation of British Kaffraria. In Australasia, Victoria to the south, and Queen's Land to the north, have been separated from New South Wales, and made independent dent Governments. Swan River and King George's Sound constitute one colony under the name of Western Australia. The name of Van Diemen's Land has been changed to Tasmania. The New Zealand islands, although forming one colony, have been divided into seven or eight separate and inde-pendent provinces. In the East we have taken possession of Hong-Kong and pendent provinces. In the East we have taken possession of Hong-Kong and Labuan, although these cannot be termed colonies. In the Pacific the sovereignty of the Feejee Isles has been accepted, and Norfolk Island colonised by the transfer of the descendants of the mutineers of the Bounty from Pitcairn's

France has taken possession of a portion of Cochin China, and of Gaboon, in

Western Africa. Denmark has given up to us Serampore, in Bengal.

Western Africa. Denmark has given up to us Serampore, in Bengal.

The cost of the several colonies of the British empire at the expense of the British Exchequer, in the year 1857, amounted to no leas than £4,115,757, against £4,887,957 in 1856, £4,804,956 in 1855, £4,466,201 in 1854, and £3,845,018 in 1853. In 1857 the list was as follows:—Gibraltar, £423,589; Malta, 442,722; the Cape of Good Hope, £682,015; Mauritius, £74,881; Bermuda, £156,061; St. Helena, 62,640; Heligoland, £1,274; the Ionian Islands, £109,470; the Falklands, £6,523; Hong Kong, £303,735; Jamaica, £103,761; the Bahamas, £52,045; Honduras, 33,802; West Indies, £305,981; Canada, £236,484; Nova Scotia, £154,605; New Brunswick, £9,430; Prince Edward's Island, £1,500; Newfoundland, £20,114; Vancourar's Island. £210: the West Coast of Africa, £126,039; Cevlon, £119,279; ver's Island, £210; the West Coast of Africa, £126,039; Ceylon, £119,279; Labuan, £12,445; North Australia, £5,666; West Australia, £94,769; South Australia, £9,940; Victoria, 44,113; New South Wales, £59,646; Tasmania, £96,936; and New Zealand, £112,395.

The following table, from the Board of Trade returns, shows the increase of exports to the principal British Colonies between 1843-47:—

Ionian Islands	-	-	-				-	-	-	- 172]	per cent.
East Indies	•	-	-	- 139		Cape Colony	-	-	-	- 270	••
Mauritius	-	-	-	- 157	11	Australia	~	-	~	- 792	99
N. A. Colonies	_	-	-	- 146		4					

Our export trade of British produce and manufactures to the various British ossessions amounted, in declared value, in 1859, to £46,125,046, or nearly onethird of the whole shipments.

COLOUR TRADE.—The export trade in painters' colours has largely increased of late years, owing to the extension of emigration and progress of settlement in the colonies. In 1859 the value of the shipments was £460,374. The chief quarters to which they are sent are, Australia, British America, the United States, the East Indies, and the Continent.

COMMERCE.—STATEMENT OF THE AMOUNT OF THE FOREIGN AND COLONIAL TRADE OF THE UNITED KINGDOM, FROM 1840 TO 1859:-

				OPPIOIAL VALUE	2.	Real or Declared	
Years.			Imports of Foreign and Colonial Merchandize.	Exports of Foreign and Colonial Merchandize.	Exports of British and Irish Produce and Manufactures.	Value of British and Irish Produce and Manufactures Exported.	
1840	•	7	£67,492,710	£13,774,145	£109,796,850	£51,406,430	
1841	-	-	64,444,968	14,723,873	102,179,514	51,634,638	
1842	-	ᅻ	65, 253, 286	13,586 422	100,255,389	47,881,093	
1843	-	-	70,214,912	13,956,288	117,876,659	59,279,709	
1844	-	- 4	75, 149 374	14,398,177	131,558,477	58,584 292	
1845	-	-	85,297 508	16,279,318	134,598'584	60,111,082	
1846	-	-1	75,934,022	16,296,162	132,312,894	57,786,876	
1847	-	-	90,921,866	20,040 979	126,131,029	58.842.877	
1848	-	-	93,547,134	18,375,886	132,619,154	52,849,445	
1849	-	-	105,874,607	25,509.670	164,539,504	63,596,025	
1850	-	-	100,460,488	21,874,212	175,416,709	71,367,885	
1851	-	·)	110,484,997	28,729,616	190,658,314	74,448,722	
1852	-	-1	109,831,158	28,328,308	196,176,601	78,076,854	
1853	-	-1	123,099,813	27,744,772	914,827,454	98,938,781	
1854	-	-	152,389,058	18,636,366	1 1	94,184,796	
1855	-	-1	143,542,850	21,003,215	1 1	95,688,085	
1856	-	-1	175,544,154	23 393,405	1 1	115,826,948	
1857	-	-1	187,814,441	24,108,194	l l	122,066,107	
1858	-	-	164,583,832	23,174,023		116,668,756	
1859	-	4			l l	130,410,427	

CHEONOLOGICAL SUMMARY OF THE PRINCIPAL EVENTS AFFECTING BRITISH COMMERCE, FROM 1841 TO 1860.

COMMERCE, FROM 1841 TO 1860.

Jan. 20. A circular is addressed by Captain Elliott to British subjects in China, announcing that arrangements have been made with the Government of China to the following effect:—1. The cession of the island and harbour of Hong Kong to the British Crown. All just charges and duties to the empire upon the commerce carried on there to be paid as if the trade were to be conducted at Whampos. 2. An indemnity to the British Government of 6,000,000 dollars if the trade were to be conducted at Whampos. 2. An indemnity to the British Government of 6,000,000 dollars in one week, as a ransom for the city; also that the Chinese troops, except those agreed to pay 6,000,000 dollars in one week, as a ransom for the city; also that the Chinese troops, except those of the proton trade of the port of Canton to be opened within ten days of the Chinese new year, and to be carried on at Whampos until further arrangements are practicable at the rftw settlement.

Feb. 5. The Pennsylvania Bank suspends payment, and is followed by other banks in Philadelphia, Baltimore, and other places, but those of New York and New England continue specie payments.

Feb. 10. The Upper and Lower Pro-1841. Jan. 20.

Feb. 10. The Upper and Lower Pro-vinces of Canada united by special act, and Lord Sydenham sworn in as Gov.-

and Lord Sydenham sworn in as Gov.-deneral.
Feb. 25. The Bogue Forts of the city of Canton captured by the British; the city almost descrice by its inhabitants. March 20. A suspension of hostilities proclaimed by Captain Elliott, chief su-perintendent of British commerce in China, and the trade of the port of Canton declared open.

July 18. A treaty for the settlement of the affairs of the East between the Sultan of Turkey and the Facha of Egypt, signed at London by the representatives of Austria, France, Great Britain, Prusia, and Rusaia, by which the hereditary possession of Egypt is confined to Mehemet All and his descendants in a direct line. The annual contribution of Egypt to the Porte is fixed at 80,000 purses, or £400,000. The Viceroy not to be allowed to build aship of war without the permission of the Sultan.

Aug. 27. The Chinese fortress of Amoy captured by the British forces under Sir H. Pottinger.

Oct. 1. The Chinese Island of Chusan captured by the British forces under Sir

oet. I. The crimese mand or crimsan captured by the British forces under Sir H. Gough.
Dec. 20. A treaty for the suppression of the African slave trade, allowing a

Corn Laws passed its second reading in the House of Lords by a majority of 47. June 12. A most disastrous fire occurred

at 8t. John's, Newfoundiand, by which nearly the whole town was destroyed. All the public buildings were burnt, and nearly 6000 persons had to peas the succeeding night in the open air. The loss of property was estimated at a mil-

lion sterling.

Nov. 5. A French squadron takes pos-session of the Society Islands, deposing Queen Pomare. mutual and limited right of search, signed at London by the representatives of Great Britain, France, Austria, Prusta and Presia 1843. Nov. 5. April 1. A Supplementary Treaty with China presented to Parliament. June 1. The Emperor of Russia arrives sia, and Russia, 1842. Jan. 5. Insurre Insurrection in Affghanistan 6000 British troops massacred. A por-tion of the Canton ransom, £550,000, June 1. The Emperor of Russia arrives in London on a visit to the Queen, and arrived in London. March 11. Sir Robert Peel proposes an leaves on the 9th.

June 22. The third instalment of the
Chinese ransom (1,000,000 dollars) remarta 11. Sir Robert Feel proposes an income-tax of about three per cent.
March 18. Chinese try to retake Ningpo.
Aug. 10—19. Serious disturbances in the manufacturing districts, and a general turn-out for higher wages.

Aug. 20. The Maine boundary treaty. ceived in London. April 12. A treaty of annexation of Texas to the United States, signed by President Tyler, but rejected by the Senate on the 8th June. Aug. 20. The Maine boundary treat settled at Washington by Lord Ash burton and Daniel Webster. August. Tanglers and Mogadore, in Morocco, bombarded, and the fortificamoreco, compared, and the fornica-tions destroyed by the French fleet. Sept. 10. Peace concluded between France and Morocco, in which all the demands of the former Power were Aug. 29. Treaty of peace between Great Britain and China concluded near Nanbritain and China concluded near Nation.

The Chinese agree to pay 21,000,000
dollars in four years, to open five of
their principal ports. Canton, Amoy,
Focchoo-fow, Ningpo, and Shanghae to
resident Consuls and to British commerce, and to eede the Island of Hong granted.
Oct. 24. Buenos Ayres declared in a state of blockade by England and France. Kong in perpetuity to the English Government. Nov. 20. The troops of General Rosas defeated on the Parana by the combined Sent. 12. General Pollock defeats an Afighan army, 13,000 strong, and a few days afterwards occupies Cabul.

Sept. 23. A great fire at Liverpool destroys twenty warehouses, many dwalling houses, and property to the value of half a million.

Oct. 1. The Afighan war terminated by proclamation of the Governor-General. Dec. 31. The Great Seal of England affixed to the treaty between the British Government and China.

March 23. Annexation of Scinda to the . 12. General Pollock defeats English and French force. Dec. 11. Sir Robert Peel's Ministry resigns on the question of the abolition of the Corn laws, but, upon the failure of Lord John Russell to form a Ministry, resumes office. Dec. 21. The Sikh army, numbering 30,000 men, defeated by the British forces on the Sutlei. Oct. 28. The New Royal Exchange opened in state by Queen Victoris.

1845. Feb. 3. A fire destroys one-fourth of the city of Bridgetown, Barbados, and property to the amount of two million dollars. 1843. March 23. Annexation of Scinds to the British Empire by order of the Go-vernor-General of India. Annexation of Scinds to the Gollars.

May 28. A dreadful fire took place in Quebec, Canada, in which more than 1500 buildings were consumed, and property to the amount of several million dollars destroyed.

June 28. A second dreadful fire takes. Jan. A treaty of commerce and na-vigation between England and Russia settled. A memorial from the Bombay Chamber of Commerce, complaining of the interference of the East India Comdollars destroyed.

June 28. A second dreadful fire takes
place at Quebec, reducing another third
part of the city to ruins; 1300 dwellings
destroyed, and at least 6000 persons
rendered houseless. pany with respect to the rates of ex-Control Control.

Aug. 26. A dreadful fire at Kingston,
Jamaica, 400 houses reduced to ashes,
and property amounting to nearly half
a million sterling destroyed.

June 24. The Act of Incorporation for
the new Bank of Madrus published, and
the bank opened July 1. rendered houseless.
July 19. A destructive fire breaks out in the city of New York, destroying 302 stores and dwelling houses, and property to the amount of 6,000,000 dollars. Feb. 10. Sir Hugh Gough with 20,000 men defeats the Sikh army numbering 36,000, and drives them across the Sutlej with a loss of 10,000 killed and wounded, the new Bank of Madras published, and
the bank opened July 1.

June 26. The ratifications of the treaty
of peace with China exchanged and
proclaimed at Hong Kong.

1843. Jan. 9. A fire at Port-au-Prince, St. Do.
mingo, destroys twelve squares, 600
buildings, and property valued at
4,000,000 dollara.

Feb. 17. Sir Charles Napler, with 2800
British troops, defeats 22,000 Beloochea
in India. while the British loss was only 2,400. Feb. 28. The measures of Sir Robert Peel for reforming the Corn Laws and the general system of Trade, carried in the House of Commons by a majority of 97. May 29. The Bill for the Repeal of the

in India. March 15. A great fire at Valparaiso destroys property of the value of 1,500,000 dollars. Oct. 24. A destructive fire occurred at Canton, by which more than 1400 houses were burnt, including the Daniah factory, Turner's factory, and part of the French factory,

in India

1845. July S. A Bill for reducing the Duty on Imports repealing the tariff of 1842, passed the American House of Repassed the American House of Re-presentatives in Congress, abolishing all specific duties and minimums. It was only carried in the Senate on July 36, by the casting vote of the Vice-President.

1847. April 26. The Bogue forts in the China Seas captured and destroyed by the British under General Daguilar and Sir Lyb Paris.

John Davis.

1849. Oct. 15. A Treasury circular announces that after January 1, 1850, British ves-sels from British or other ports will be allowed to enter American ports with cargoes, the produce of any part of the world, on the same terms as to duties, imports, and charges as vessels of the United States and their cargoes.

Dec. 24. A large fire at San Francisco, California, consumed 1,500,000 dollars

California, consumed 1,500,000 dollars worth of property.

1850. Dec. France protests and Lord Palmerston remonstrates at Vienna against the proposed extension of the Germanic Confederation beyond the Alps.

1851. May 1. The Exhibition of the Works of Industry of All Nations in Hyde Park, inaugurated by Queen Victoria.

— Dec. 2. Coup d'etat by Louis Napoleon. Paris occupied by troops. National Assembly and Council of State dissolved and Universal Suffrage re-established.

1852. May. Offensive operations carried on against the King of Ava by General Godwin; Martaban and Bassein taken.

— June 1. The first Submarine Cable, 80 miles long, successfully laid.

June 1. The first Submarine Cable, 80 miles long, successfully laid.
June 17. The islands Rustan, Bonasca, Utilia, Barbarat, Helene and Morat, in the Bay of Honduras, constituted into a British colony under the name of "The Bay Islands."
July 8. A tremendous fire broke out at Montreal which raged two or three days, destroying more than 1100 houses and rendering upwards of 12,000 people houseless. houseless. Nov. 30. A Turkish squadron destroyed by the Russians at Sinope, in the Black 1868 Nov 30.

Dec. 10. The French and British Fleet

key and the Allied Powers.

April 12. The French squadron sails from Brest to join the British fleet in the Baltic. April 22, Odessa bombarded by the Allied ficets.

April 30. The first railway opened in Brazil

March. The Chancellor of the Exche March. The Chancellor of the Exche-quer announces an intended increase of the property tax, and an issue of £1,750,000 of unfunded debt. A French loan of £10,000,000 and one for Turkey of £2,750,000 announced.

The declaration of war

against Russis published in a supplement to the London Gazetta. Numerous failures occurred.

1854. April. £6,000,000 of Exchequer bills negociated by Mr. Gladstone.

— June 10. The Crystal Palace at Syden-

ham, opened by Queen Victoria.

Dec. The war exercises a depressing influence on trade, which also suffers from the changes which had taken place in our mercantile relations with Australia and America.

1858. Feb. 18. The Chancellor of the Exchequer notifies the intention of the Government to raise a loan for £5,000,000 and to fund £xchequer Bills to the amount of £8,000,000.

April 2. The Czar authorizes the experience of wheat from all the Russian

April 5. The Sultan's permission for the establishment of the Ottoman Bank received in London.

April 15. A treaty signed between England, France, and Austria guaranteeing the independence and integrity of the Ottoman Empire.

April 20. The ports of Greytown and San Juan del Norte are blockaded by a fleet of French, English, and American

April 28. The treaty of peace with Russia is published, and formally pre-claimed on the 29th. May 9. The Government of Denmark

publish a protocol containing proposals for the redemption of the Sound Dues, to which the Governments of Russia, Swe-1856.

which the Governments of Russia, Sweden, and the Grand Duchy of Oldenburg had given their official adhesion.
July 15. The district of Natal, Southern Africa, constituted a separate colory.

August 2. News from Monte Video reports the passing of a law by the Argentiae Confederation, levying double duty on goods shipped from Buenos Ayres and University in order to achieve a direct

on goodsanipped from Succion Ayres and Uruguay, in order to enforce a direct trade with Europe. Nov. 8. The Chinese at Canton attempt to destroy the British ships by fire-rafts. Nov. 21. The Board of Trade notify that Carthagena, New Granada, is declared a free nort.

free port. Dec. 9. A treaty is concluded after two

Dec. 9. A treaty is concluded after two years negociation between Great Britain and the Sultan of Morocco and Fes.

Jan. 14. Austria refuses, in correspondence with France on the navigation of the Danube, to recognise the right of the parties to the Treaty of March 30, to interfere with the Riverian convention.

Jan. 5. Computationer Value to exampted

Jan. 5. Commissioner Yeh is captured at Canton, and sent a prisoner on board the Inflexible.

Feb. 10. The blockade of Canton is raised. Feb. 12.

Lord Palmerston moves for leave to bring in a bill to transfer from the East India Company to the Crown the government of Her Majesty's East India governmen dominions.

March 22. Commissioner Yeh arrives

March 24.

March 24. A loan of £5,000,000 for the
East India Company is announced in
London, with interest at 5 per cent.

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April 13. A fearful confiagration breaks out at Christiana; the Bank, the Exche-quer, and a great portion of the city destroyed, the loss being estimated at about 10,000,000 francs. 1856. April 18.

about 10,000,000 francs.

April 23. A resolution is agreed to in
the House of Commons, imposing a
duty of one penny on bankers' cheques.

April 27. Aftre occurs at St. Katharine's Docks which destroys property valued at about £100,000.

April 29. The allied English and French Fleets are at anchor at the mouth of the

Fleets are at anchor at the mouth of the Petho, and six days are granted to China for a reply to the demands of the Plenipotentiaries.

April 30. The Chancellor of the Exchequer moves a resolution "That it is expedient to transfer the government of India to the Crown," which is agreed

May 17. The United States by Treaty guarantee the perpetual severeignty and neutrality of the State of Panama. May 20. The Chinese forts at the mouth of the Peiho are captured by the Eng-lish and French forces.

May 25. The bill imposing a penny stamp on cheques comes into operation June 2. A Convention is concluded be-tween the British and Brazilian Govern-The bill imposing a penny ments relating to outstanding claims with Brazil.

June 11. The Board of Trade notifies that by Imperial decree a new system is established for the measurement of ves-

sels in Russia.

June 18. Russia and America sign

Treaties of Peace with China, which country is now thrown open to the commerce of Europe. A previous Treaty with Russia, made 28 May, fixes the southern limits of the Russian frontier, leaving the left bank of the Amoor in possession of the latter Power.

June 21. A fire breaks out at Fresh

Wharf. Lower Thames Street, destroy-

whar, Lower Thames Street, destroy-ing property valued at £100,000.

June 26. The Treaty of Tien-tain, con-sisting of 56 articles, is signed by the Earl of Eigin and the Chinese Imperial

Earl of Eigin and the Chinese Imperial Commissioner.

June 29. A most destructive fire breaks out in the London Docks which rage for several hours, accompanied by tremendous explosions from the saltpetre warehouses; the loss is computed at about 2150,000.

July 13. A Russian ukase imposes

July 13. A Russian ukase imposes a duty of five copecs per rouble upon all articles of European imports and exports, except raw and refined sugara. Aug. 4. The Mersey Dock Board having completed a capacious dock at the north end of Liverpool, intended for the accommodation of the timber trade, name it the Canada Dock.

Aug. 5. Telegraphic communication established across the Atlantic from Valencia, Ireland, to Trinity Bay, Newfoundland,

Valencia, a foundland.
Aug. 11. The Netherlands Government ports open from foundand.
Aug. 11. The Netherlands Government
declares the following ports open from
the 1st June, 1859, to the ships of all nations. In Java: Anjer, Bantam, Indramayoe, Cheribon, Tagal, Pekalongan,

Rembang, Passaroewang, Probolinge, Besoeki, Panoroekan, Banjoewangie, Pangool, Patjitan, Tilistjap, and Wyn-koopsbay. In Sumatra: Natal and Priaman. In Borneo: Sampit. 1868. Aug. 13. A Convention signed at Paris by the Plenipotentaries of France, Great Britain, Austria, Prussia, Russia, Sar-dinia, and Turkey, organises the Princi-palities of Moldavia and Wallachia into united States under the sovereignty of the Sultan. the Sultan.

Aug. 26. Lord Elgin concludes at Yeddo a treaty of commerce with Japan, by which a permanent British mission is agreed to, and resident Consuls at the ports thrown open to commerce. The ports three upon are Hakodadi, Kanagawa, and Nagasaki, at which British trade is a commerce of the consultation of the and Nagasaki, at which British trade is permitted from the ist July, 1859. Nece-gata to be opened on the 1st Jan. 1860; Hiogo on the 1st Jan. 1863; Yeddo, in Jan. 1863, and Casaca in 1863. Sept. I. The last sitting of the Court of Directors of the East India Company; a new Council for India under a Secretary of State baring been suponted.

of State having been appointed.
A grand celebration at New York and
many other American cities, in honour
of the successful laying of the Atlantic
Submarine Cable.

Submarine Cable. Sept. 13. The port of Villafranca is ceded for 20 years to Russia by Turin. Nov. 1. A Royal proclamation issued transferring the government of India to the Crown, and nominating Lord Can-

the Cruws,
ning Viceroy.
Nov. 1. A decimal system of weights and
measures, similar to that of France, comes
in Saxony. The new into operation in Saxony. The new Austrian currency is circulated, and the National Bank resumes its cash pay-

menta.

Nov. 2. Electric communication is opened between the towns of Melbourne, Sydney, and Adelaide.

Nov. 6. The new Chinese Tariff and trade regulations are signed by Lord Eigin at Shanghae.

Nov. 11. Bussia notifies to Austria its intention to terminate the Treaty of commerce concluded July 8, 1866, for eight years, but determinable at any time by a previous notice of 12 months.

Nov. 13. A fire at Valparaise destroys property to the amount of 8,000,000 dollars.

Dec. 3. The first through train as Advanced to the present the state of the st

Dec. & The first through train on the Suez railroad crosses the Isthmus in 11 hours from Suez to Alexandria.

Dec. 18. By a decree of the President of the Dominican Republic, the ports of Samana, Romana, and Monte Christi, in St. Domingo, are declared closed to foreign commerce.

because the foreign commerce.

Dec. 31. A new treaty of commerce and navigation concluded between Great Britain and Russia.

Jan. 2. By a Treety of alliance at Rio, between Brazil, the Argentine Confede-ration, and Uruguay, the independence and integrity of the latter State is

guaranteed.

Jan. 15. General Giffraid, the new President of the Republic of Hayti, opens
by a decree to commerce the ports of St.

	COM	76	COM
	Mark, Miragoane, Aquia, and P. Pair. Jan. 18. A treaty of commerce, n tion, and friendship concluded be the State of Nicaragoa and Great B by which the neutrality of the Lath recognised. April 26. The King of Sardinia: to comply with the summons of A to disarm. The French Charge faires at Vienna agneunces to the train Government that the French rich Government that the French rain Government that the French rain Government that the French rain of war. April 28. The Emperor of Austrianton of war. April 28. The Emperor of Austrianton of war, a troops cross the Ticino. May 3. The French Emperor Pairs declaration of war. May 10. The Emperor Napoleon Paris for the seat of war. May 20. The battle of Montonght, in which the allies defeaultrians. June 4. The battle of Magenta fi	ort de 1859. aviga- tween vitain, unus is o d'Af- e Aus- the decla- a pub- nd his blishes 1000,000 leaves tebello 1860.	June 24. Battle of Solferine fought, in which the Austrians are defeated, but with very heavy lose on both sides. June 25. The Engthsh and French attempting to force the peasage of the Petho, are repulsed by the Chinese with a lose of 634 killed and wounded, the lose of 634 killed and wounded, the lose of 8 gun boats, and others greatly injured. July 9. The island of 8sn Juan, near Vancouver's Island, taken possession of by General Harney with the United States troops. Governor Douglass, of British Columbia, protests. July 11. A Treaty of Peace signed by the Emperors of France and Austria at Villafrancs. July 25. A strike commences among the builders of London for shorter working hours, which is continued for many months. Oct. 22. Announcement made in the Spanish Cortés by General O'Donnell that Spain was about to commence war with Morocco. Jan. 20. A Treaty of Commerce signed as Paris between Her Majesty and the French, by which important commercial concessions in respect to duties are
: c o	and on the 8th the French Emper King of Sardinia enter Milan. MMERCIAL TRRATIES.	.—The follo	made by each nation. wring is a list of the countries
Aur	MUICU MG BOM USAG TICSHOS	or Commerc	e, Navigation, and Reciprocity. Equalization of Shirming Dues.

						Equalization of Shipping Duca.
Abyminie	•	•	Nov. 2, 1849	Reciprocity	Most favoured	
Austria	•	-	July 3, 1838	Reciprocity	Most favoured. Conditional	National treatment.
Baden Bavarta	•	•	Mar. 2, 1841	See Prussia		
Belgium	-	-	Oct. 27, 1851	Reciprecity		National treatment.
Bolivia	-	-	Sept. 29, 1840	Reciprocity	Most favoured	National treatment.
Dorneo	•	-	May 27, 1847		Most favoured	British ships not to pay a higher duty than I dollar per ton (register) in ports of Borneo.
Bremen	-		Aug. 8, 1841	See Harise Towns.	,	•
Puenos Ay	res	-	Feb. 2, 1825	Reciprocity	Most favoured	National treatment on vessels over 120 tons burthen.
Chin	-	-	Oct. 4, 1854	Reciprocity	Most favoured	National treatment.
China	-	-	Oct. 8, 1843		Most favoured	57 46 5 A 4-
Costa Rica		-	Nov. 27, 1849	Reciprocity	Most favoured Conditional	National treatment.
Denmark	•	-	June 16, 1824	Reciprocity	• •	National treatment.
Dominica	-	•	Mar. 6, 1850	Reciprocity	Most favoured Conditional	National treatment.
Ecuador	-	-	May 8, 1851	Reciprocity	Most favoured Conditional	National treatment.
France	•	-	Jan. 26, 1826	Reciprocity Navigation	Most favoured Navigation	National treatment in direct trade and in ballast.
Frankfort	•	•	May 13, 1832 Dec. 29, 1835	Reciprocity	• •	National treatment.
Frankfort (Union)	(Custon					
Germany Union)	(Custon	15	Mar. 2, 1841	See Prussia.		
Greece	-	-	Oct. 4, 1837	Reciprocity		National treatments
Guatemals	L	-	Feb. 20, 1849	Reciprocity	Most favoured Conditional	National treatment.
Hamburg		•	Aug. 8, 1841	See Hanse Towns.		

				Equalization of Shipping Dues.
Hanover -	- July 22, 1844	Reciprocity	Most favoured	National treatment.
	(Sept. 29, 1825	Reciprocity	Conditional	National treatment,
Hanse Towns	Aug. 3, 1841			direct. National treatment,
Hosse Cassel Hosse Darmstadi	Mar. 2, 1841.	See Prussia.		Indirect.
Honduras Japan -	- Aug. 27, 1856 - Aug. 26, 1858	Reciprocity	Most favoured Most favoured	National treatment.
Johanna - Liberia -	- June 3, 1850 - Nov. 21, 1848	Reciprocity Reciprocity	Most favoured	National treatment. National treatment.
Lubeck -	- Aug. 8, 1841	See Hanse Towns.	Conditional	
Mecklenburg- Schwerin	- May 1, 1844	Reciprocity	Most favoured	National treatment.
Mecklenburg-Str		Reciprocity	Most favoured	National treatment.
Mexico - Morocco -	Dec. 26, 1826 Dec. 9, 1856	Reciprocity	Most favoured Most favoured	National treatment. National treatment.
Musest -	- May 31, 1839	Reciprocity	Most favoured	Sum not exceeding 5 per cent. on im-
				ports, to cover tonnage dues, &c.
Nassau -	Mar 2, 1841 (Mar. 17, 1824	See Prussia.	Most favoured:	
Netherlands	- Oct. 27, 1837	Reciprocity	East Indica Most favoured	
	Mar. 27, 1851		Conditional	National treatment.
New Granada (Colombia)	- Apr. 18, 1825	Reciprocity	Most favoured	National treatment.
Oldenburg Paraguay -	- Apr. 4, 1844 - Mar. 4, 1853	Reciprocity Reciprocity	Most favoured Most favoured	National treatment. National treatment.
Persia -	- Mar. 4, 1857		Conditional Most favoured	
Peru -	- Apr. 10, 1850	Reciprocity	Most favoured Conditional	National treatment on vessels over 200 tons burden.
Portugal -	- July 8, 1842	Reciprocity	Most favoured Conditional	National treatment, in direct trade and in ballast.
Prussia, &c. (Cu	- Apr. 2, 1824	Reciprocity	• •	Mational treatment.
toms Union) Reuss Gleitz	- Mar. 2, 1841	Reciprecity		National treatment.
Reuss Schleitz . Reuss Lobenste and Ebersdorff	in } Mar. 2, 1841	See Prussia		
Roman States	- Nov. 17, 1858	Reciprocity Navigation	Most favoured	National treatment.
Russia -	- Jan. 12, 1859	Reciprocity	Most favoured Conditional	National treatment.
Sandwich Islands	- July 10, 1851	Reciprocity	Most favoured Conditional	National treatment.
Sardinia -	Jan. 23, 1851		-	National treatment.
	(Feb. 27, 1858	Reciprocity	Most favoured Conditional	
Saxe Weimar Eis	10 <u>-</u>]			
Saxe Meiningen Saxe Altenburg Saxe Coburg Got Saxony Schwartzburg	ha Mar. 2, 1841.	See Prussia.		
Rudolstadi Schwartzburg So dershausen).			
Slam -	June 20, 1826 - April 18, 1855 May 13, 1856	- • •	Most favoured	British shipping ex- empt.
Sicilies -	- April 29, 1845	Reciprocity	Most favoured Conditional	National treatment, in direct trade and in ballast.

				Equalization of hipping Dues.
Sweden and Norway -	- Mar. 18, 1896	Reciprocity	Most favoured	National treatment. Decree, Oct. 26, 1849
Switzerland Thuringian Union	Pept. 6, 1855 Mar. 2, 1841	Reciprocity See Prussia.	Most favoured	•
Turkey -	Jan 5, 1809 Aug. 16, 1838	Reciprocity	Most favoured	
Tuscany -	Apr. 5, 1847 (July 8, 1815)	Reciprocity		National treatment.
United States	Oct. 20, 1818 } - Aug. 6, 1827	Reciprocity	Most favoured	•
	(June 5, 1854	Reciprocity	• •	National treatment. Notification, Oct. 15, 1849.
Uruguay -	- Aug. 26, 1842	Reciprocity	Most favoured Conditional	National treatment.
Venezuela	- Nov 7, 1825; Oct. 29, 1834	Reciprocity	Most favoured	National treatment.
Wurtemberg	Mar. 2, 1841	See Prussia.		

COPPER. The imports of copper ore and regulus have largely increased of late years, having risen from 40,000 or 50,000 tons some ten or fifteen years back to 97,000 in 1858. There is also a larger quantity of partially wrought copper or metal imported. The imports, which were under 30,000 cwts. in 1844, reached 218,000 cwts. in 1859. Very full and precise information is now given as to the production of copper, and all the statistics connected with the trade in copper in the Mining Records, issued annually from the Museum of Practical Geology. Mr. Robert Hunt gives the following as the production of copper in the United Kingdom:—

		1857.	1858.
Copper Ore, tons Value of Copper Ore Fine Copper, tons Estimated Value of ditto	***	218,698 £1,560,922 17,375 £2,154,545	226,852 £1,336,535 14,456 £1,562,698

There are 164 mines, of which 123 are in Cornwall and Devon. The mean average price of fine copper ore was £124. in 1857, and £108. in 1858. In 1859 it went up as high as £144. 17s. The total quantity of copper ore produced from British and from foreign and colonial ores in 1858 was 31,611 tons, of the value of £73,417,149.

The following continues, down to the present time, the value of the exports of this metal in its manufactured state:—

Year.	Declared Value.	Year.	Declared Value.
	€.	·	€.
1839	1,280,586	1850	1,978,196
1840	1,450,464	1851	1,639,156
1841	1,523,744	1852	1,704,083
1842	1,810,749	1858	1,854,831
1843	1,644,248	1854	1,768,950
1844	1,735,873	1855	2,110,906
1845	1,694,441	1856	2,648,259
1846	1,558,187	1857	8,124,049
1847	1,541,868	1858	2,854,551
1848	1,257,944	1859	2,600,807
1849	1,875,865		

In 1859, unwrought copper of the value of £471,076 went to France, £103,576 to India, besides sheet and copper, &c. of the value of £612,484. Holland and Belgium, the United States and Brazil, are the other principal purchasers.

CORN. In the absence of any reliable data, it has been impossible hitherto

to determine, with any degree of accuracy, the amount of grain and provisions annually produced, the quantity stored, or whether a larger or smaller breadth of land has been sown in one season than another, throughout the kingdom. The injury that results from this ignorance has not been confined alone to the farmers, who are frequently outwitted by importers and others flooding the markets, but all dealers in, and consumers of, agricultural products are equally liable to sustain pecuniary loss therefrom, by making false calculations and depending upon erroneous estimates. The shipowner, the merchant, the corn dealer, the baker, and the wheat grower in the colonies and foreign countries, all suffer from the absence of correct statistics as to the home production and consumption of grain. Of late years we have had agricultural statistics collected in Ireland and Scotland, but there are none for England and Wales. In the Journal of Agriculture of Edinburgh, for June, 1856 (p. 177), in a long and elaborate statistical article, I took some pains to estimate the production, consumption, and commerce of grain in Great Britain, America, and France, and from that article I may extract a few facts.

Towards the fourth quarter of the last century, we began to import largely of grain, the excess of imports of corn over exports having amounted in that period to about 20,000,000 quarters. From 1800 to 1837 the annual average of wheat and wheat-flour imported did not exceed half a million quarters; but subsequently to that year, on the repeal of the Corn Laws, the receipts from abroad began largely to increase, averaging in the next four years more than 2,000,000 quarters. While the quantity of all kinds of corn imported from 1843 to 1846 did not exceed, on the average, 4,000,000 quarters; the famine year, 1847, brought in immense supplies, reaching to nearly 12,000,000 quarters.

In the last twenty years we have imported from various countries the following quantities of grain in quarters, including pulse:—

-	-	•	•	9,651,956	1003	-	-	-	-	8,22U,101
_					1859	_				9,220,737
-	-	-	-	6,945,492	1858	-	-	•	-	10,188,265
-	-	-	-		1857	-	-	•	-	8,545,182
-	-	-	-			-	-	-	-	8,197,253
-	-	-	-			-	-	-	•	5,729,241
•	-	-	-			-	-	-	-	6,850,500
-	-	-	-		1853	-	-	-	-	8,847,608
•	-	-	-		1852	-	-	-	-	6,641,729
•	-	-	-		1851	-	•	-	-	8,093,401
-	-	-	-	8,475,098	1850	-	-	٠.	_	7,920,864
				: : : :	8,258,698 8,361,786 1,308,516 2,747,951 2,157,727 3,790,951 9,436,677	8,268,698 1851 8,361,756 1859 1,305,516 1859 2,747,961 1854 2,167,727 1855 8,790,961 1856 9,436,677 1857	8,258,998 1851 8,361,766 1853 1,305,516 1853 2,747,851 1854 2,157,727 1855 9,436,677 1857 - 9,436,677 1857	8,258,098 1851 8,361,736 1859 1,305,516 1859 2,747,951 1854 2,157,727 1855 3,790,951 1856 9,436,677 1857	2,268,698 1851 3,261,766 1859 1,305,516 1859 2,747,851 1854 2,747,851 1855 3,790,651 1856 9,456,677 1857	8,258,098 1851

We also received large quantities of flour and meal, namely:-

Year.	Wheat Flour.	Other kinds of Meal.	Total.		
	Cwts.	Cwts.	Cwts.		
1840	1,537,838	8,708	1,546,546		
1841	1,263,126	12,530	1,275,656		
1842	1,129,852	21,003	1,150,855		
1843	436,878	5,584	442,462		
1844	980,645	4,056	984,701		
1845	945,864	8,052	948,916		
1846	8,190,429	157,137	8,347,565		
1847	6,329,058	2,304,933	8,633,991		
1846	1,754,449	275,788	2,030,237		
1849	8,349,839	162,001	3,511,840		
1850	8,819,440	18,568	3,838,008		
1851	5,314,414	18,955	5,333,869		
1852	8,865,173	1,546	3,866,719		
1853	4,621,506	16,504	4,638,010		
1854	3.646,505	58,655	3,705,160		
1855	1,904,224	18,094	1,922,318		
1856	8,970,100	21,267	3,991,367		
1857	2,178,148	6,028	2.184,176		
1858	8,856,127	9,869	3,865,996		
1859	3,328,324	1 1			

80 MODAL ADALY AND MEAT, THEODERN IN IMPERIAL OF ARTERS.

			_							•	
1840	•	•	-	•	8,920,014	1850	-	-	•	-	9,019,590
1841	•	•	-	•	8,627,562	1851	-	-	•	•	9,618,028
1842	-	_	-	-	8,697,279	1852	•	•	-	•	7,746,689
1843	•	-	-	-	1,433,891	1858	-	-	•	•	10, 172, 135
1844	•	•	•	•	8,030,681	1854	-	-	-	-	7,909,544
1845		-	-		2,429,916	1855	-	-	-	•	6,278,813
1846	•	-	-	-	4,752,174	1856	-	-	-	-	9,889,425
1847	-	-	-	•	11,912,864	1857	-	-	-	•	9,169,180
1848	-	-	-	-	7,528,472	1858	•	-	-	•	11,289,060
1849	-		-		10,609,661	1859	•	-	-	-	11,293,705
					the transer		044	484			

France and the United Kingdom contain a population of 65,000,000, who are fast acquiring that higher standard of comfort which enables the masses to consume good wheat-bread in place of much cheaper vegetable food. In Northern and Central Europe, in Italy, in France, and the United States, brown bread and maine bread are gradually giving way to wheaten bread.

Place good wheaten bread and that made from Indian-corn meal on the tables of the million, and rye-bread, meal dumplings, and oatmeal porridge will in a few years cease to exist. Even in the British West Indies, Cuba, Brazil, and Central America, the consumption of American wheat and flour is largely on the increase, and is taking the place of plantains, yams, and other indigenous

farinaceous food.

The estimates of the production of wheat in the United Kingdom vary considerably. I take it that the breadth of land under wheat at present is fully 5,000,000 scres, which, at a yield of four quarters per acre for a good harvest, would give a return of 20,000,000 quarters. The average import for many years past, we have seen, has been upwards of 7,000,000 quarters of grain and meal, but in the last seven years it has been fully 9,350,400 quarters per annum. We will take the whole supply, in round numbers, at 30,000,000 quarters. Of our home produce about 2,000,000 quarters would be required for seed, for starch, manufacturing, and other purposes, leaving, say, 28,000,000 quarters to supply the population in ordinary years.

In considering this question, much will depend upon the ratio of consumption

by which we calculate. Mr. Card places it at about 51 bushels per head for 26,000,000 persons. Some statists reckon it as high as one quarter, but probably the medium of 6 bushels per head may be considered a fair average. For all practical purposes, then, we may take the population of the United Kingdom now at 28,000,000, and the annual consumption by these, at 6 bushels per head,

would be 21,000,000 quarters.

I may here quote an estimate of the Bankers' Circular, which is more mode-te. The writer frames it upon the following deductions:—He takes the quantity of wheat sold in the markets, whence the averages are drawn, as one-third of the total growth in England and Wales, and, adding the quantity imported, considers the total would furnish a near approximation to the consumption, if the produce of Ireland and Scotland is added. The figures thus given show an average annual consumption in the following six years of about 18,000,000 quarters.

		Home Produce. Quarters.	Imports of Wheat & Flour. Quarters.	Total. Quarters
1849	•	14,361,949	4.802.475	18.164.424
1850	-	14,064,741	4,830,963	18,895,004
1851	-	18,461,128	5,880,412	18,791,635
1852	-	14,563,539	4,164,104	18,728,142
1853		18,612,736	6,235,860	19,918,596
1854	-	11,789,771	4,473,085	16,212,656

Mr. Colquboun, an able statistical writer, about forty years ago calculated the consumption in Great Britain, for a population of 17,000,000, to be 9,170,000 quarters of wheat, and 25,780,000 quarters of other grain. Twenty-five years ago, Mr. James Macqueen (General Statistics of the British Empire) estimated the land under culture in the kingdom, with wheat at upwards of 5,000,000 acres, and in other kinds of grain at 10,000,000 acres, his summary of the quantity and value of the grain crops being as follows:-

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Wheat Barley Oats, &c.	:	Acres, 5,000,000 2,000,000 8,000,000	Produce per Acro. 4 Quarters 5 Quarters 6 Quarters	Quantity. 20,000,000 at 50s. 10,000,000 at 36s. 44,000,000 at 30s.	£ 50,000,000 18,000,000 60,000,000
				•	

Total value - \$184,000,000

These figures, although too high at that period, are very near the mark now, except of course as to the value.

The estimated consumption of the cereals and pulse in Great Britain was thus given in 1825:--

					l'otal	-	ters.	_	•	42,000,000
Rye -	•	-		-	-		-	-	-	800,000
Pease and	l Beans		-	•	•	•		-	-	2,200,000
Oats -	. 	•	-		-			•-	-	20,000,000
Barley	-	•	-	-	-	•	-	-	-	8,000,000
Wheat		-	•	-			-	-	•	11,000,000

In Jacob's Report of the Corn Trade and Agriculture, the average production of wheat in England, in the eleven years ending with 1827, was stated at 12,760,000 quarters, 1,300,000 quarters being reserved for seed. The largest

harvest was 16,000,000 quarters in 1820; the smallest 11,500,000 in 1824.

Mr. Braithwaite Poole, a very careful and well-informed inquirer, in his Statistics of British Commerce, published in 1852, states that the annual average production of all sorts of corn in the United Kingdom has been estimated by competent parties at rather more than 60,000,000 quarters, and £80,000,000 in value; but, in the absence of general official returns, we cannot vouch for its accuracy, although, from various comparisons, there are reasonable grounds for assuming this calculation to be as nearly correct as possible. Some persons in the corn trade imagine the aggregate production to approach almost 80,000,000 quarters; but I cannot find any data extant to warrant such an assumption

According to this estimate, the produce of grain, &c. in different districts

would be about as follows:-

		Wheat.	Oats.	Barley.	Beans, &c.
England	١.	15,200,000	12,500,000	6,875,000	1.875,000
Ireland		1,800,000	11,500,000	1,120,000	540,000
Scotland	1 .	1,225,000	6,560,000	1,800,900	150,000
	Quarters	18,225,000	30,500,000	9,298,000	2,565,000

ESTIMATED ACREAGE.

		Wheat	Oats.		Barley.	Beans, &c.
England		8,800,000	2,500,000		1,500,000	500,000
Ireland		600,000	2,800,000		320,000	50,000
Scotland	•	850,000	1,800,000	-	450,000	80,000
				-		
		4.750.000	6.100.000		2 270 000	680 000

Mr. M'Culloch, in his Geographical Dictionary, article "Scotland," assumed the distribution of the crops for North Britain to be as follows:-

			Acres.	Produce	Total.
Wheat -	-		220,000	3 Quarters	660,000
Barley -	-	-	280,000	34 44 8	980,000
Oata -	-	-	1,275,000	44	5,727,500
Beans and I	Pesse	-	100,000	8	800,000

The statistics taken for 1857 show the following figures for Scotland:-

					Acres.	Produce (Quarters)
Wheat	-	-		•	228, 152	769.366
	-	-	•	-	198,887	811,817
Oats and I	Rye	•	-	•	956,831	4,111,068
Beans		-	-	-	42,878	129,720
					1,420,298	5,821,971

82 The Irish Census Commissioners in 1858 returned the land under cultivation with cereal crops at-

		Acres.	Quartera
Wheat	•	- 551,396	546,964
Oats	-	- 1,976,929	1,981,241
Barley, Rye, &c.	-	- 207,210	207,240
			-
		9 725 595	9 795 445

According to the agricultural statistics partially taken recently in some of the English counties, under the Poor-Law Inspectors, it was roughly assumed that the land now under cereal crops in England and Wales might be taken to be-

Wheat	-	•	-	-	•	-	-	-	3,807,846 acres
Barley .	-	•	-	-	-	-	•	•	2,667,776
Oats	•	•	-	-	-	-	•	•	1,302.782
Rye -	-	•	•	•	•	•	•	•	78,731
Beans and	Pear	6		•	•	•	•	•	696,188
									R 550 292

Having glanced at the production and consumption of grain in our own country, let us next examine the great American fields of production in the United States and Canada.

The shipments of corn of various kinds from the great grain depôts of America and the continent are now on an enormous scale; but those of the New World are fast outstripping the Old. Witness the following figures, showing the shipments from the principal ports, at stated periods:—

				Bushels of Grain
Odessa, 1853	-	•	-	21,997,696
Galatz and Ibraila, 18	51	•	•	12,732,000
Dantzic, average	-		•	4,408,000
St. Petersburg, do.	-	-		7,200,000
Archangel, do.	-	•		2,128,000
Riga, do.	•	•		4,000,000
St. Louis, 1853	•	-	•	5,081,488
Milwaukie, 1854	•	•	•	8,747,161
New York, do.		•	•	9,500,000
Buffalo, do.		-		22,000,000
Chicago, 1856	•	-	-	21,583,291
Cleveland, 1858	-		-	6,000,000

The Hon J. Perkins, junior, of the American Patent Office, in his report on the agriculture of the United States for 1853, stated the following to be the amount of the several grain crops and pulse raised:-

Indian Corn	•	-	600,000,000	bushels.
Wheat	•	-	110,000,000	••
Rye	•	•	14,000,000	••
Oats	-	•	160,000,000	••
Buckwheat	-	•	10,000,000	••
Beans and Pease	-	-	9,300,000	••
Rice	•	-	250,000,000	••
			1,153,800,000	••

Or 144,412,500 quarters.

The aggregate value of these crops he gave at £82,000,000 sterling. The value of American flour alone exported in the year 1853 was nearly £3,000,000 sterling. The land under cultivation in the United States is about 118,000,000acres.

An examination of the statistics proves that by far the largest production of wheat in America is between the parallels of 40° and 50° latitude—comprehending Ohio, Pennsylvania, New Jersey, and the largest part of Illinois, which annually produce half the wheat raised in the United States. Compared with the production immediately south of them, the wheat raised in Michigan,

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Wisconsin, and Canada, is as yet comparatively small, but still largely on the increase.

The state of Ohio usually raises about one-fifth of all the wheat grown in the States. The laws of Ohio require the assessors to ascertain annually the precise breadth in acres of wheat and Indian corn planted, and the quantity produced. The acres planted in wheat averaged, in 1850 to 1852, 1,731,000; and the aggregate produce of those three years was 10,000,000 quarters, and the average 3,332,000 quarters. The average yield per acre of the three years was about 15 bushels.

In the year 1853 an average crop of wheat was raised in the United States, and, owing to the scarcity in Europe, as much as 3,000,000 quarters of flour and wheat was exported; but it left the home markets very bare. The domestic consumption by the white population may be taken at 13,563,000 quarters, and for seed 1,250,000 quarters—making an aggregate home demand of 14,813,000 quarters. Out of a crop of 25,000,000 bushels, Ohio can export about 14,000,000 bushels. The following was the production and export of wheat in the United States, in the years named, in bushels:—

Years.		Crop.		Export.
1849	:	100,485 9 14		6,000,000
1850	·	142 000 000	. :	7,782,191
1851		101,000,000	•	12,088,380
1852	•	148,000,000		16,551,902
1858	•	110,000,000	•	94,000,000
1854	•	150,000,000	•	19,000,000

In 1855 there was very little wheat and flour shipped from the States.

I can give the value in subsequent years of the shipments of grain and meal from the United States, but not the quantities.

	Fiscal Years ending June 30, Value in Dollars of Shipment:					
	1855.	1856.	1857.	1858.		
Wheat Flour	1,829,246 10,896,908 6,961,571 1,937,122 236,248 238,976	15,115,661 29,275,148 7,622,565 1,175,688 214,563 2,718,620	22,240,857 25,882,316 5,184,666 957,791 115,828 680,108	9,061,504 19,338,884 3,259,039 877,692 56,235 642,764		
Dollars	20,900,071	56,122,245	55,061,566	83,226,118		
£	4,180,015	11,224,449	11,012,313	6,645,223		

Average prices of grain in the United States:-

	1856.		1:	857.	1858.	
	Dols.	Cents.	Dols.	Cents.	Dols.	Cents.
Wheat Flour, sup. barrel .	7	47	6	23	4	73
Corn Meal, barrel .	4	14	3	54	3	67
Wheat, White Western, bushel	2	06	1	69	1	43
Wheat, Red Winter .	1	88	1	56	1	24
Wheat, Spring	1	65	1	89	1	02
Rye	1	14	0	92	0	79
Oats	Ō	44	Ō	49	Ō	48
Indian Corn	Ó	81	Ō	73	Ō	76

The Now York Courter and Enquirer, a highly respectable commercial journal, has taken great pains to furnish reliable estimates of the wheat production, and after extended inquiry and considerable research, gives the following tables, which seem entitled to weight.

Estimate of the Growth of Wheat in the different American States and Territories in 1855, as compared with the production of 1847, as per Patent Office Report, and 1850, by Census Returns, vis.

DOLP BRIEF TOOLS O	y Com	DATE TACCOURTED, ATP.		
		1847.	1850.	1855.
		Bushels.	Bushels.	Bushels.
Maine -	•	89,000	296,259	400,000
New Hampshire	-	610,000	185,658	250,000
Vermont	•	664,060	525,925	700,000
Massachusetts	-	256,000	81,221	100,000
Rhode Island	-	4,500	49	•••
Connecticut	-	125,000	41,762	80,000
New York	•	14,500,000	13, 121, 498	15,000,000
New Jersey	-	1,100,000	1,601,190	2,500,000
Pennsylvania	-	14,150,000	15,367,691	18,000,000
Delaware	-	410,060	482,511	500,000
Maryland	-	4,690,000	4,494,680	6,000,000
Dist. Columbia	-	•••	17,370	20,000
Virginia	•	12,000,000	11,282,616	15,000,000
North Carolina	-	2,350,000	2,130,102	4,000,000
South Carolina	• .	1,300,000	1,066,277	8,000,000
Georgia	-	1,950,000	1,088,534	4,000,000
Florida	-	•••	1,027	550,000
Alabama	-	1,900,000	294,044	2,000,000
Mississippl	-	500,000	137,990	1,000,000
Louisiana	-	•••	317	•••
Texas	•	1,110,000	41,689	1,000,000
Arkansas	-	200,000	199,588	1,000,000
Tennesses	•	8,750,000	1,619,386	8,000,000
Kentucky	-	6,000,000	2,140,823	8,000,000
Obio	-	16,800,000	14,487,851	20,000,000
Michigan	•	8,000,000	4,925,889	7,000,000
Indiana	-	7,500,000	6,214,488	12,000,000
lllinois	-	4,900,000	9,414,575	16,000,000
Missouri	•	1,750,000	2,966,928	7,000,000
lows	•	1,000,000	1,530,481	8,000,000
Wisconsin	•	1,200,000	4,286,131	7 ,000, 000
Minnesota	-	•••	1,401	8,000,000
Kansas	-	•••	•••	1,000,000
New Mexico	•	***	196,516	500,000
Utah	•	•••	107,702	1,500,000
Oregon	-	50,000	211,043	1,500,000
California	•	••	17,328	8,000,000
		114,245,560	100,479,150	175,200,000

These estimates indicate a product of 65 per cent. beyond that of 1850, or 175,000,000 in the aggregate. If we allow 31 bushels of wheat per head (other grain being largely used), or 100,000,000 of bushels for home consumption, there would then be on hand, for export or future stock, about 75,000,000 bushels. Some of the States show a product of from 100 to 500 per cent. beyond that of 1847—the Irish famine year. This increase is almost incredible; but we

think the facts will fully bear us out in our estimates, viz:-

Estimated Production of Wheat in some of the old, as well as the new States and Territories, in 1855, compared with 1847 and 1850, shewing the vast increase in the supply.

-		1847.	1850.	1855.
		Bushels.	Bushels.	Bushels.
North Carolina	-	2,350,000	2,180,102	4,000,000
South Carolina	-	1,300,000	1,066,277	8,000,000
Georgia	•	1,950,000	1,088,584	4,000,000
Tennesses	•	8,750,000	1,619,386	8,000,000
Missouri	-	1.750.000	2,966,928	7,000,000
Illinois	•	4,900,000	9,214,575	16,000,000
Indiana	•	7,500,000	6,614,458	12,000,000
Iowa	•	1,000,000	1,530,561	8,000,000
Wisconsin		1,200,000	4,286,181	7,000,000
California	•	••	17,828	8,000,000
Minnesota	•	••	1,401	8,000,000
Kaness and Nebr	aaka		••	1,000,000
Oregon	•	50,000	211,943	1,500,000
•		80,750,000	30,547,614	77,500,000

From 1847 to 1850 there was no increase; but from 1850 to 1855 the increase was 120 per cent.

American States and Territories where there is a Surplus beyond the Consumption required for each, viz.—

•		•		
		Produced. Bushels.	ntity Consumed. Bushels.	Excess. Bushels.
New York	-	14,500,000	12,200,000	2,300,000
New Jersey -	•	2,500,000	1,800,000	700,000
Pennsylvania -	-	18,000,000	9,000,000	9,000,000
Delaware and Maryland	•	6.000.000	2,500,000	4,000,000
Virginia -		15,000,000	4,500,600	10,500,000
N. Carolina, S. Carolina and Georgia	١-	11,000,000	7,700,000	8,300,000
Texas and Arkansas -	`	2,000,000	1,800,000	709,000
Tennesses -	_	8,000,000	8,800,000	4.700,000
Kentucky -	-	5,000,000	8,000,000	2,000,000
Ohio -	-	20,000,000	9,000,000	11,000,000
Missouri and Wisconsin	Ξ	14,000,000	2,800,000	11,000,000
Illinois -	-	16,000,000	4,000,000	12,000,000
Indiana -	7	12,000,000	8,800,000	8,200,000
Iowa and Minnesota	•	11.000,000	2,000,000	9,000,000
Missouri -	•	7.000,000	2,500,000	4,500,000
	-	8,000,000	700,000	
Kansas, New Mexico and Utah	-			2,000,000
California and Oregon	•	8,000,000	1,800,000	1,200,000
Total Deduct :—	•	-		96,600,000
Deficiency in ten other States			12,450,000	
For Seed and Stock	-	-	20,000,000	82,450,000
Surplus for Export	•	•	bushels	64,150,000

In order to show the relative productiveness of the several States, we have examined the subject carefully, and we think the following conclusions are very near the truth:—

Table showing the Average Number of Bushels per acre, and the Time of Harvesting in each of the principal Wheat-growing States.

State.			Average No. of Bush, to Acre.	Time of Harvesting.			
Maine		:	7 to 13	Aug. 10 to Aug. 20			
New Hampshire	:		12 to 20	Aug. 1 to Aug. 10			
Massachusetts	:	•	10 to 20	July 25 to Aug. 10			
Vermont	•		15 to 25	Aug. 10 to Aug 20			
New York	•	•	10 to 20	July 15 to Aug 10			
New Jersey	•	•	15 to 25	July 1 to July 10			
Pennsylvania		•	12 to 22	June 20 to July 10			
Delaware		•	12 to 20	June 20 to July 10			
	•	•	10 to 20				
Maryland	•	•					
Virginia	•	•	10 to 20				
North Carolina	•	•	8 to 15	June 10 to June 20			
South Carolina	•	•	8 to 12	June 1			
Georgia	•	•	8 to 12	June 1			
Alabama	•	•	8 to 15	June 1 to June 20			
Tennessee	•	•	_8 to 19	June 10 to June 20			
Kentucky	•		12 to 15	July 1			
Ohio		•	10 to 20	July 1 to Aug. 1			
Indiana			12 to 30	June 20 to July 20			
Illinois			12 to 25	June 1 to July 25			
Michigan			15 to 25	July 10 to July 80			
Iowa	-	-	19 to 20	July 10 to July 25			
Wisconsin			15 to 25	July 15 to July 80			
Texas	•	•	90 to 25	May 15 to June 15			
Oregon	:	•	20 to 25	Aug. 1 to Sept. 1			
	•	•					

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Value of the Breadstuffs and Provisions exported from the United States to foreign countries, for each fiscal year, from 1846 to 1858, viz.:—

1846		27,701,121 dollars.	1858		32,985,322	dollars.
1847		68,701,921	1854		65,901,240	
1848		87.472.751	1855	•	23,651,362	
1849		38,155,507	1856	•	59,390,906	
1850	-	26,051,373	1857		58,883,176	
1851	-	21,944,651	1858	-	85,924,848	
1852		25.857.027			,,	

The exports of agricultural produce from Canada were, in

			1647.	1858.	185 4 .
Wheat, bushels	•	-	719,688	2,666,903	1,442,677
Flour, barrels	-	-	670,808	786,058	651,400
Indian corn, bush	els -	-	•	481	87,636
Barley and rye, do		-	25,882	43,353	112,383
Moal, barrels	-	-	22,038	4,081	4,842
Beans and pease,	bushels	•	121,570	243,770	133,651
Oata.	do.	-	168,672	1,028,310	83,651
Potatoes.	đo.	-		6.477	7.568

In 1853, 2,666,903 bushels of wheat were exported, and in 1852 nearly 2,000,000 bushels. The following comparison shows the relative production of Canada and the United States as regards the grain crops:—

	Unter	UNITED STATES.		CAMADA		
Wheat, bushels Barley, ,, Oats, ,, Rye, ,, Maize, ,,	1840, 84,823,272 4,161,504 123,071,341 18,645,567 877,531,875	1850. 92,086,000 5,167,016 146,567,879 14,188,639 592,326,612	1842. 3,221,991 1,031,335 4,788,167 292,370 691,359	1851. 16,155,946 1,389,499 21,434,840 869,985 2,029,544		
Population,	 17,067,458	23,091,488	1,176,837	1,843,500		

From the above table it will be seen that, in proportion to its extent and population, Canada is a more agricultural country than the United States. The usual quantity allowed for the consumption of each inhabitant is generally five bushels, which would leave for export six or seven million bushels of wheat. The great quantity of Indian corn grown in the States enables them, by making it a staple of consumption, to export a large stock of flour. In Canada, little Indian corn being grown, wheat becomes of necessity the great staple of food.

GRAIN IMPORTS BEFORE AND AFTER FREE TRADE.

A few statistics are grouped together below in illustration of the imports of grain and flour into the United Kingdom before and after the adoption of the free-trade policy in 1849. Of wheat the totals stand thus:—

		BEFOR	B FREE T	RADE.		
Year.		Qrs.	1	Year.		' QTS.
1843		940.190	1	1846	•••	1,432,591
1844	•••	1,099,077		1847	•••	2,656,455
1845	•••	871,710	1	1848	•••	2,680,059
		AFTEE	FREE TE	LADE,		
Year.		Qrs.	1	Year.		Ors.
1850	•••	8,788,995		1855	-	2.667.702
1851	•••	3,812,008	4	1856	***	4,079,888
1852	•••	8,060,968	1	1857	•••	8,437,957
1853	•••	4,915,480	1	1858	***	4,241,719
1854		8,431,927	ī	1859	•••	4 043 574

Year.

Cat

These figures exhibit an average in the former period of 1,596,858 quarters, and in the second of 3,742,171 quarters, or an increase under free trade of about 134 per cent. Extending the comparison to other grain, the totals stand thus:—

BEFORE FREE TRADE.

Year.		Qrs.	1	Year.		Qns.
1843	•••	365,396	ı	1846	•••	2,358,360
1844	•••	1,648,874	- 1	1847	***	6,780,222
1845	***	1,286,017	ı	1848	•••	4,364,533
		AFTER	FREE T	RADE.		
Year.		Qrs.	- 1	Year.	•	Ors.
1850	***	4,181,869	1	1855	***	8,061,539
1851	***	4,281,398	- 1	1856	•••	4,124,420
1852	•••	3,581,461	- 1	1857	•••	5,107,225
1853	•••	8,932,178	- 1	1858	•••	5,946,546
1984		8 410 978		1850	• • • •	6 960 000

The average between 1843 and 1848 was 2,800,567 quarters, and in the last 10 years 4,299,481 quarters, or an increase under the present system of 53 per cent. The imports of meal and flour of all kinds next invite attention, and have been as under:—

BEFORE FREE TRADE.

1848 1844 1845	•••	442,462 934,701 948,916		1846 1847 1848	•••	8,247,565 8,683,991 2,080,287
		AFTER	FREE	TRADE.		
Year.		Cwt.	1	Year,		Cwt.
1850		8,838,008	- 1	1855	***	1,922,318
1851 .	***	5,888,869	1	1856	•••	8,991,869
1852		3.866.719	1	1857		9,184,176

The average between 1843 and 1848 was 2,732,212 quarters, and in the last 10 years 3,669,991 quarters—showing an increase of 34 per cent. The increase in the quantity of grain and flour imported has been very generally shared in by all the various countries from which we draw our supplies.

I will take one more country into consideration—the great empire of France, which ranks high as a producing country. With the exception of Russia, from which no accurate statistical returns have been obtained, more than one-half of the wheat grown in Europe is produced in France—the yield, twenty years ago, having been about 24,832,500 quarters, now 28,000,000 quarters.

IMPORTATION and EXPORTATION of GRAIN into and from France from 1816 to 1852.

	: Im	ported in exce	es of Expor	te.	Exported in exc	cess of Imports.
From 1816 to 1821	•	6,247,178 Ъ	ectolitres	-	_	hectolitres.
., 1822 ,, 1827	•	· -	11	-	1,248,601	**
, 1828 , 1832	•	9,527,466	yy *	-		n
,, 1833 ,, 1837	-		19	-	944,130	**
,, 1839 ,, 1842 ,, 1843 ,, 1847		1,126,473 18,697,132	**	-	_	11
1949 1959	•	10,007,108	19	:	12.187.416	**
			10			44

The hectolitre contains 22 imperial gallons, 3 hectolitres being a trifle more than a quarter.

In 1853, France imported 4,184,190 hectolitres of wheat, spelt, and meslin, of the value of 92,637,966 francs; 313,671 metrical quintals of flour; 83,851 hectolitres of rye; 111,000 hectolitres of barley; 66,773 hectolitres of oats; and 24,603 hectolitres of maize.

The average production of wheat in France is estimated at 80,000,000 hectolitres (about 28,000,000 quarters), the highest production during the last twenty-five years having been 97,000,000 in 1847, and the lowest 52,000,000 in 1830. In the United Kingdom, out of about 50,000,000 acres under cultivation, 15,000,000 are sown in wheat, and other cereal crops, while in France 50,000,000 are cultivated for grain; but while the average growth of wheat per acre in England is fully 3 quarters, in France it is but 1½ quarters. The growth of wheat has increased very much of late years—much faster in proportion than the population; and there are numerous evidences that the bulk of the people are much better fed and in a more prosperous condition than they used to be. The following table will show the progress of the population and production during twenty years:—

88

Years.	Population.			Aver	rage I	TO	duction	of Wheat in fi	ve Years.
1831	22,569,223	•	•	From	1827	to	1831	57,821,336 ha	ectolitres.
1836	88,540,910	•	•		1832			68,684,919	11
1841	84,940,178	-	•	77	1837		1841	71,512,258	79
1846	85,400,486	-	•	**	1842			72,015,564	**
1851	85,781,621	-	•	**	1847		1851	86,121,128	**

The highest and lowest annual average prices of wheat in France during the fifty years from 1803 to 1852, taken in intervals of five years, have been as follows:—

		Lowest price.		Highest price.		Average of five years		
		F.	ē.	P.	c.	F.	C.	
From 1808 to 1807	-	18	60	20	19	19	59 p	er hectolitre.
,, 1808 ,, 1819	•	15	18	84	34	23	39 ⁻	**
,, 181 3 ,, 1817	•	17	78	36	16	94	86	"
, 1816 , 18 12	•	15	89	34	65	19	18	,,
,, 1823 ,, 1827	•	14	81	18	81	16	58	,,
, 1828 , 1832	-	21	17	22	59	22	04	"
, 1883 , 1887	-	14	72	16	87	15	94	" **
,, 1838 ,, 1842		18	34	22	49	20	35	11
,, 1843 ,, 1847	•	18	98	29	38	22	28	**
1848 1852		14	26	17	50	15	60	

The lowest average was f. 14.26—33s per qr. in 1850, the highest f. 36.16—76s 8d per qr. in 1817. The ten years' averages during the above periods have been:—

				F. c.
1803 to 1813		•		20 99
1813 ,, 1822	•			22 02
1823 , 1832			•	19 81
1833 ,, 1849				18 14
1842 1859				18 04

And the general average for the same fifty years was f. 19.88=46s 1d per qr.

The following have been the yearly averages per hectolitre:-

				F.	c.						F.	e.
1846	•	•		28	86	1	1850	•	•	•	14	26
1847		•		29	38	1	1851		•	•	14	64
1848		•	•	16	86	- [1859	•	•	•	17	5 0
1040				18	98							

The average price of wheat in France in the three years 1851, 1852, and 1853, was 43s 34d per quarter.

According to the "Statistique Territorials," the cultivated area under grain a few years ago in France was—

		-		Hectares.	in hectolitres.
Wheat	•	٠.	•	5,586,786	19.45
Rye	•	•	•	2,577,953	10.79
Barley	•	•	•	1,188,189	14.09
Oats	•	•	•	8,000,634	16.30
Maize	•	•	•	631,732	12.06

12,964,594 The hectare is about two acres.

The average produce of wheat per acre in France, prior to 1844, according to an official report, was under 14 bushels; but the foregoing returns make the produce equal to about 17 bushels to the acre. The progress of Algeria as a grain-exporting country is worthy of notice, particularly since the adoption of the customs law. The shipments have advanced in the following ratio:—

				Wheat.	Barley.
1850	:	: .	i	2,868 hect.	10,856 hectolitres.
1854	•	•	•	1,033,718 ,,	559,048 ,,
1856	•	•	•	9,000,000	
1857			•	1909.53 grs.	20.285 ars.

So that in four years the export of corn from thence has risen from 13,700 hectolitres to about 1,600,000 hectolitres, besides about 100,000 shipped as flour and biscuits to the army in the East, during the war. There was under culture with grain in Algeria in 1855, 707,852 hectares, which produced 9,124,571 hectolitres.

The production and export of grain in Russia and Germany, in India and Australia in Chili and other quarters would form on interesting regions but

The production and export of grain in Russia and Germany, in India and Australia, in Chili, and other quarters, would form an interesting review; but this would lead me too much into detail to be followed out in the present inquiry. The reliable facts and figures already adduced in this article may, however, prove useful to some who have not the same advantages for careful elaborate research, and will at least serve to mark the rapid advance making in the culture and commerce of grain abroad.

Average Gazette Prices of British Wheat, Barley, and Oats per Imperial Quarter, and the Foreign Imports of Grain:—

Years.	Aver	age price per q	narter.			olonial Grain en- ne Consumption.
ľ	Wheat.	Barley.	Oats.	٦.	Wheat.	Other Grain.
I	s. d.	* d.	s. d.	- -	Qrs.	Qrs.
1840	66 4	86 5	25 8 22 5	- 1	1,993,888	1,481,715
1841	64 4	32 10	22 5	- 1	2,409,754	848,944
1842	57 8	27 6	19 8	- 1	2,717,454	644,311
1843	50 I	29 6	18 4	Į	940,120	365,396
1844	51 8	88 8	20 7	- 1	1.099.077	1.648.874
1845	50 10 ·	81 8	22 6	- 1	871,710	1,286,017
1846	54 8	32 8	23 8	1	1,482,591	2,858,360
1847	69 9	44 2	28 8	- 1	2,656,455	6,780,222
1848	50 6 44 3	31 6	20 6	-	2,580,959	4,864,583
1849	44 8	27 9	17 6	- 1	8,845,378	5,806,578
1850	40 8	23 5	16 5	- 1	8,788,995	4,181,869
1851	88 6	24 9	18 7	- 1	8,812,006	4,281,393
1852	40 9	28 6	19 1	ı	8,060,268	3,581,461
1853	53 8	83 2	21 0		4,915,430	8,932,178
1854	72 5	3 6 0	27 11	- 1	8,431,227	8,419,271
1855	74 8	34 9	27 5	- 1	2,667,702	3,061,539
1856	69 2	41 1	25 2	- 1	4,072,833	4,124,420
1857	56 4	42 1	25 0	- 1	8,437,957	5,107,225
1858	44 2	34 8	94 6	- 1	4,241,719	5,946,546
1859 (43 9	83 6	23 2		4,023,578	5,276,447
			Total	-	57,925,522	68,225,011
			Average		2,896,276	8,411,250

		1848.		1	1858.	
Imported from.	Wheat.	Oats.	Other Grain.	Wheat.	Oata.	Other Grain.
Russia Denmark Prussia Mocklenburg Schwerin Hanover Hamburgh Holland Belgium France Turkey Proper Wallachia and Moldavia	Qrs. 522,427 191,785 522,049 146,077 16,099 359,596 163,684 171,782 216,524	931,745 68,410 5,283 113,474 57,965 179,923 613 4,585	577,446 371,094 31,650 33,828 949,120 91,774 12,701	625,978 110,839 27,264 143,205 82,113 77,884 818,251 66,594	180,162 100,608 45,447 32,879	282,067 271,353 9,635 69,044 31,928 17,567 401,927 879,774
Egypt United States East Indies British North America Sweden Other Countries	17,156 78,184 926 37,189	228	341,310 941,225 7 18,317	464,644	10,757	50.608
Re-exported	2,530,959 5,747	7,476	<u> </u>	88,571	1,856,281 81,687	36,382
Entered for Consumption .	1,848,879	868,706	1,550,593	4,236,864	1,846,626	4,082,445

QUARTITIES of British Wheat, Barley, and Oats sold in the principal Market Towns in England and Wales.

Years.	Wheat.	Barley.	Oats.
	Qrs.	Qrs.	Qrs.
1841	3 ,918, 92 7	l	V
1849	4,091,234	l	ł
1848	5,302,298		
1844	5,456,807	·· 2.834.407	1,989,730
1845	6,666,940	2,468,489	2,000,952
1846	5,958,962	2,938,398	1,970,448
1847	4,637,616	2,041,130	960,834
1848	5,399,834	2,401,787	1,022,875
1849	4.453,988	2,099,821	851.080
1850	4,688,247	9,235,271	866,082
1851	4.487.041	2,333,710	940,006
1852	4.854.518	2,389,439	947,550
1853	4,560,912	2,474,206	880,408
1854	8,913,257	2,267,997	765,428
1855	5,256,874	2,608,862	816,688
1856	5,046,786	2.678.986	
1857	5,243,940	2,262,783	701,159
1858	5,203,948	2.434.378	537,364 482,766

COSTA RICA.—The number of vessels that entered the port of Punta Arenas in 1858, was 68, of 26,069 tons. The shipments in that year consisted chiefly of 60,355 quintals of coffee, 11,678 hides, and 462,000 feet of cedar wood.

Total Value of Imports and Exports, distinguishing British, from 1854 to 1858.

	Імро	RTS.	EXPORTS.		
Years.	British.	Total.	British.	Total	
1854 1855 1856 1857 1858	£ 142,000 53,100 78,000 15,000 186,600	£ 205,000 141,311 188,969 40,000 200,000	£ 97,445 66,190 86,179 88,207 40,117	£ 164,237 153,480 168,362 257,473 102,847	

COTTON.—The following table continues down the British trade in cotton to the present time from the year 1840, given at page 219.

Account of the Quantities of Cotton imported into the United Kingdom, and the Quantities exported and entered for Home Consumption; also the average prices of Upland, or Bowed Georgia, in each year, from 1841 to 1859.

ı		Імровта.			Retained for	점점
Years. United States.	Other Countries.	Total	Exports.	Consumption and Stock.	Upland per lb.	
	lbs.	lbs.	lbs.	lbs.	lba.	d.
1842	414,030,779	117,719,307	531,750,086	42,251,302	473,976,400	51
1843	574,738,520	98,454,596	673,193,116	89,619,979	581,303,105	45
18 44	517,218,622	128,892,682	646,111,304	47,222,560	554,196,602	4
1845	626,650,412	95,329,541	721,979,958	42,916,384	679,063,569	4
1846	401,949,393	65,906,881	467,856,274	65,930,704	401,925,570	4
1847	364,599,291	110,108 324	474,707,615	75,054,320	399,653,295	6
1848	600,247,488	112,782,673	713,020,161	74,203,792	638,816,369	4 1
1849	684,501,050	120,964,962	755,469,013	99,893,536	656,575,476	5
1850	493,153,112	170,423,749	663,576,86	102,469,696	561,107,165	7¥
1851	596,638,962	160,740,787	757,379,749	111,980,400	644,550,800	5}
1852	765,630,544	164,151,904	929,782,448	111,875,456	817,906,992	5
1853	658,451,796	236,826,953	895,278,749	148,569,680	746,709,069	5
1854	722,151,346	165,181,803	887,333,149	125,554,800	761,778,349	5
1655	681,629,424	210,121,528	891,751,953	124,358,160	767,383,792	55555
1856	780,040,016	213,816,288	1,023,886,304	146,660,8 64	877,225,440	6
1857	654,758,048	814,560,948	969,318,896	131,927,600	837,391,296	71
1858	833,237,776	201,104,400	1,034,342,176	149,609,600	906,000,000	6]
1859	961,707,264	264,281,808	1,225,989,073	175,143,136	1,050,845,936	6 <u>ł</u>

Norz.—After the removal of the import duty on cotton, which took effect from the 19th March, 1845, the only means of ascertaining the consumption and stock is by subtracting the exports from the imports.

Of the 201,104,400 lbs. imported from other countries than the United States in 1858, there were received from the East Indies 132,722,576 lbs., from Egypt 38,232,320 lbs., from Brazil 18,617,872 lbs., from the West India Islands and British and Dutch Guiana only 493,248 lbs., from St. Helena 2,010,736 lbs., from South Africa 1,001,280 lbs., from Mauritius 1,678,656 lbs., from the Continent 5,532,566 lbs., from Peru 274,208lbs., from the West Coast of Africa 237,912 lbs., and the rest from other quarters.

The supply of cotton from India has largely increased of late years, and, notwithstanding the extensive demand for local consumption by the natives, considerable exports may always be depended upon when the price is remunerative enough to induce shipments. The total exports from all parts of India have been as follows:

Years.	To United Kingdom.	To all places.	Price of Surat per lb.
1850-51 1851-52 1852-58 1853-54 1854-55 1856-56 1856-57 1857-58	Ibs. 141,446,798 81,104,923 181,360,994 188,183,429 119,513,537 170,771,510 253,410,086 197,221,247	1bs. 226, 473, 683 253, 552, 931 262, 908, 178 197, 761, 765 173, 780, 192 287, 179, 949 319, 653, 524 260, 354, 052	d. 31 34 34 44 54 44

Statement showing the number of bales of Cotton Imported, Exported, and taken for Consumption in each year for the United Kingdom, with the Stock held in the ports at the close of each year, from 1841 to 1859 inclusive, also the average weekly consumption per annum.

Years.	Imports.	Exported.	Taken for Consumption,	Stock in ports 31 Dec.	Weekly Consumption.
	Bales	Bales.	Bales	Bales.	Bales
1841	1.844.000	116,300	1,192,300	429,800	22,929
1842	1,392,900	184,400	1,160,400	456,600	22,315
1843	1,744,100	120,200	1,867,300	658,800	26,294
1844	1,661,600	126,860	1,428,600	749,600	27,473
1845	1,855,700	119,900	1,574,400	885,400	80,119
1846	1,184,194	194,200	1,585,900	545,790	80,370
1847	1,232,700	221,850	1,105,998	451,190	22,230
1848	1,738,441	189,500	1.505,331	496,050	26,602
1849	1,905,248	256,300	1,586,608	558,390	80,512
1850	1,748,137	272,400	1,513,007	531,190	29,481
1851	1,904,565	268,500	1,662,585	494,600	81,973
1852	2,857,278	282,800	1,911,558	657,520	85,799
1853	2,264,270	849 ,600	1,854,610	717,560	87,012
1854	2,172,597	816,400	1,949,827	624,450	37,487
1855	2,278,218	816,900	2,099,298	486,470	40,871
18 56	2,468,869	358,700	2,963,899	832,740	41,998
1857	2,417,586	837,250	1,960,566	452,510	29,049
1858	2,442,629	848,600	2,174,559	871,980	41,618
1859	2,828,900	437,050	2,294,310	469,590	44,121

Norm.—The capacity of the cotton bales imported into Liverpool has materially increased of late years. The average of all the bales has risen from 381 lbs. weight in 1847 to 423 lbs. in 1859.

COTTON MANUFACTURES.—The following tables exhibit the course and progress of our export trade in cottons, and the quantities of the different descriptions of these goods which composed the shipments at different periods, continued from page 223.

Account of the Declared Value of Cotton Manufactures and of Cotton Twist and Yarn exported to different Countries in 1840 and 1850.

	184	0.	185	0.
Countries.	Manufactures.	Twist and Yarn.	Manufactures.	Twist and Yarn.
Russia Sweden Norway Donmark Prussia Hanover Hanse Towns Holland Belgium France	\$ 59,292 2,386 10,996 2,188 645 919,710 540,746 93,665 64,039	£ 1,082,912 62,386 15,609 4,024 1,809 2,451,299 1,642,151 4,416 42,625	£ 89,413 5,735 25,525 33,478 3,024 3,615 797,253 509,211 66,094 123,088	£ 245,625 19,885 27,477 46,118 22,315 185,423 2,277,399 1,265,749 168,135 81,916
Portugal Spain and Canaries Gibraltsr Italy and Italian Isles Maita Iomian Islands Greece Turkey Wallachia and Moldavia	721,399 34,905 610,456 1,119,135 63,345 39,245 497 741,880	26,816 432 8,369 510,040 16,198 9,311 152,774	585,938 36,991 214,187 1,184,890 126,978 79,081 119,574 1,877,244 134,885	24,814 2,815 2,749 528,091 19,015 15,676 24,032 80,758 76,103
Carried over	5,028,374	6,027,671	5,919,824	5,05±,097

	1840).	185	D.
Countries.	Manufactures.	Twist and Yarn.	Manufactures.	Twist and Yarn.
Brought over Syria and Palestine Egypt Barbary States West Coast of Africa Britiah South Africa Cape Verd Islands Ascension and St. Helena Mauritius Britiah Indis Eastern Archipelago China and Hong Kong Australia & South Sea Islands Britiah North America Britiah West Indies & Guiana British Hord Landes Hayti United States Maxico Colombia Central America New Granada Venezuela Ecuador Brasil River Plate States Uruguay Beemos Ayres	5,032,374 174,526 62,621 46,790 261,297 121,674 2,431 1,849 152,338 2,964,454 367,866 288,271 146,156 530,297 1,162,887 289,939 157,260 886,669 232,912 238,556		\$ 5,919,824 202,033 326,877 12,313 270,069 187,365 1,132 3,221 115,412 4,128,427 488,812 891,691 318,099 569,091 505,983 125,445 578,607 185,200 1,128,061 166,744 173,241 188,456 15,218 188,456 15,218 1,511,186 94,891	Yarn. \$ 5,034,097 69,308 20,900 201 1,184 1,040,328 14,546 126,569 3,392 24,036 194 1,796 694 6,861 10,696 190 150 277 1,041 124 126 6,031
Chili Peru Russian North America Channel Islands	877,446 465,846 44,869	258	871,499 8,313 42,813	19 512
Total	16,302,220	7,101,808	20,530,435	6,888,704

Statement of the Quantity and Declared Value of British Cotton Manufactured Goods exported from the United Kingdom, distinguishing the descriptions of goods, in various years since 1840 (in continuation of the table given at p. 223.)

	1840.	1845.	1850.	1855.	1859.
White or Plain Cotton yards value £	438,114,378 7,802,772	678,415,780 9,661,014	767,654,348 9,817,197	1,282,467,158 14,272,999	
Printed or Dyed Cotton yards value & Hosiery & Small Wares.	857,517,624 8,494,448	418,270,289 8,368,794	590,528,595 10,712,288	686,501,068 11,849,204	87,040,127
including Stockings value £ Twist & Yarn, pounds value £	1,265,090 118,470,223 7,101,308	1,126,288 135,144,865 6,963,235	1,343,262 181,370,368 6,888,704	1,927,099 165,498,548 7,249,116	192,341,516
Other kinds of Cotton Goods Total declared value £	24,668,618	26,119,881	28,257,401	34,798,4 18	48,208,444

^{*} The white and printed or dyed Cottons are not distinguished in 1859.

This single branch of British manufactures has now become of vital national importance. It is interwoven with all that relates to the employment of our population, of our capital, and of our shipping; and bears directly on our national credit, our solvency, and our domestic peace, contentment, and security.

Its rapid growth is wonderful; its magnitude is stupendous; and its connection with all that is precious and important in the country, is so close and inseparable, that the boldest and the most far-seeing minds in the community cannot contemplate any serious vicissitude befalling it without the utmost alarm and terror.

In the official organ of the Cotton Supply Association of Manchester, it was stated early in 1860, that upwards of 500,000 workers are now employed in our cotton factories, and it has been estimated that at least 4,000,000 persons in this country are dependent upon the cotton trade for subsistence. A century ago Lancashire contained a population of only 300,000 persons; it now numbers 2,300,000. In the same period of time this enormous increase exceeds that on any other equal surface of the globe, and is entirely owing to the development of the cotton trade. In 1856 there were in the United Kingdom 2,210 factories, running 28,000,000 spindles and 299,000 looms, by 97,000 horse power. Since that period a considerable number of new mills have been erected, and extensive additions have been made to the spinning and weaving machinery of those previously in existence. The amount of actual capital invested in the cotton trade of this kingdom is estimated to be between £60,000,000 and £70,000,000 sterling. The quantity of cotton imported into this country in 1859 was 1,226 million pounds' weight, the value of which at 6d per lb. is equal to £30,650,000 sterling. Out of 2,829,110 bales of cotton imported into Great Britain in that year, America supplied us with 2,086,341, that is 5-7ths of the whole. In other words, out of every 7 lbs. imported from all countries into Great Britain, America has supplied 5 lbs. India sent us about 500,000 bales, Egypt about 100,000, South America, 124,000; and other countries between 8,000 and 9,000 bales. In 1859 the total value of the exports from Great Britain amounted to £130,513,185, of which £47,920,720 consisted of cotton goods and yarns. Thus, more than one-third, or £1 out of every £3 of our entire exports, consists of cotton. Add to this the proportion of cotton which forms part of 12 millions more exported in the shape of mixed woollens, haberdashery, millinery, silks, apparel, and slops. Great Britain alone consumes annually 25 millions' worth of cotton goods.

In the British dependencies in the East Indies, we have a population of more than 150 millions; and the value of cotton manufactures exported to them in 1853 was £5,680,000, or equal to 9d per head. To Russia, with its population of 67 millions, our exports amounted to £180,000, or equal to $\frac{1}{10}d$ per head; but to those parts of Russia supplied through ports in the Black Sea, with a population of three millions, our exports amounted to £13,000, or $1\frac{1}{4}d$ per head. France had 36 millions (or nearly 37 millions) of population; and to France, in 1853, we sent cotton manufactures to the value of £155,710, or at the rate of 1d per head. To British North America, with a population of 2,456,000, we exported £749,000 worth of cotton manufactures; which was equivalent to 6s $1\frac{1}{4}d$ per head. The United States, with a population of 27 millions, took to the value of £4,182,901, or at the rate of 3s 1d per head. While our exports in that year amounted to 32,712,000, we retained at home not less than £21,224,000 worth of cotton manufactures—showing that the people of the United Kingdom consumed our staple manufacture at the rate of 15s 5d per

head per annum.

To the population of the globe, about 850 millions, Great Britain supplied cotton manufactures to the extent of very nearly £54,000,000 sterling, being an average of 1s 3½ per head. The £53,000,000 or £54,000,000 sterling representing the products of the cotton industry of Great Britain and Ireland, may be regarded as one-half the cotton industry of the world. Foreign countries, besides taking one-half of the raw cotton sent into the market, receive large supplies of cotton yarn from Great Britain; and in Asia and Africa cotton is still largely spun by hand. Hence the cotton industry of the world may be valued at £120,000,000 sterling, which would give an average consumption per year, for every man, woman, and child upon the globe, of 2s 9½ worth of cotton manufactures, or about fourteen yards each per annum of excellent calico.

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CUBA.—The population in 1854 was 1,449,462 souls, of whom 564,698 were whites, 216,177 free mulattoes, and 668,587 slaves. The number of vessels that whites, 210,17 free inflations, and 665,57 slaves. The full field for the ports in 1855 was 3848, of 754,993 tons, of which but 865 vessels and 154,714 tons was under the Spanish flag. The value of the imports in 1855 was £6,633,378, and of the exports £7,395,6000. The exports included 1,905,580 boxes of sugar, 31,214 pipes of spirits, 473,399 arrobas of coffee, 54,970 arrobas of bleached wax, 372,608 cwt. of copper ore, 9,921,711 lbs. of tobacco, 356,582 thousand of cigars, and 256,100 bocoyes (of 30 gallons) of molasses.

CURRANTS.—Great Britain is the current market of the world, its con-

sumption exceeding that of all other nations, and three-fourths of the entire produce being imported into this country. The Morea furnishes us with three-fifths, and the Ionian Islands with two-fifths of our supply. The far greater proportion of the value of the currants we import is paid for by our exports of British manufactures; and during the five years, 1851-55, our exports to the Ionian Islands exceeded our imports therefrom by £177,129, and in the three years ending 1858, they about balanced each other. The exports of currants have been as follows since 1844:-

	cwts.	cwts.	cwts. i	cwts.
1844	284,378	1848 . 402,267	1852 . 347,088	1856 . 351,725
1845	. 352,706	1849 . 457,592	1853 . 267,265	1857 . 898,894
1846	. 895,094	1850 . 429,607	1854 , 120,253	1858 . 582,380
1847	. 395,574	1851 . 721.119	1855 . 163,729	1859 . 557,861

The quantities entered for home consumption in the last few years have been as follows:-

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cwts. cwts. cwts. cwts. cwts. cwts. 1856 . 226,123 | 1857 . 255,956 | 1858 . 384,531 | 1859 . 482,425
```

Of the total imports in 1858, 455,136 cwts. came from Greece, and but 89,458 cwts. from the Ionian Islands.

The carrying trade between the United Kingdom and the currant-producing countries of the Mediterranean, is principally carried on in British bottoms, to the extent in ships of 72 per cent. and in tonnage of 62 per cent. of the whole commercial marine employed. The average consumption per head of our population is not one ounce per week. The recent reduction in the duty to 7s per cwt. may have some effect in stimulating consumption, for in 1834 when the duty was reduced from £44. 6s 8d to £22. 3s 4d per ton, the consumption was increased from 5,593 to 9,296 tons; and when in 1844 the duty was reduced from £22. 3s 4d to £15. 15s, the consumption increased from 9,296 tons to 14,912 tons.

The following are the rates of duties levied by different States on currants:-

			£. 3.	. d.		1		£.	8.	d.		
Austria and ti	he Zollv	rerein	11 0	0	per ton.	Russia		4	0	0	per ton.	
Holland		•	1 16		***	United States		3	5	Ó		
France			0 5	0		United Kingdo	m	7	0	0	-	

			Curranta impo	rted from
			The Ionian Islands.	Greece.
			cwts.	cwts.
1831			162,868	21,132
1832	•		108,079	45,148
1833	•		97,912	28,569
1834	•		153,404	81,094
1835			127,571	45,286
1836	-		186,778	56,216
1837	:	•	156,043	52,468
1888	•		94,440	74.162
1839			133,874	71.594
1840			133,343	83,795
			1,803,302	529,395
	Average		130,830	52,939

			Currants imported from				
ł			The Ionian Islands.	Greece.			
1841			ewta. 107,604	cwts. 65,021			
1843	•	•	156,840	106,175			
1042	•	•	142,485	92,173			
184 3 1844	•	•	133,958	141,194			
	•	•	100,000				
1845	•	•	175,872 266,308	168,045 125,084			
1846	•	•	200,500				
1847	•	•	185,659	205,555			
1848	•	•	174,656	225,175			
1849	•	•	171,709	282,819			
1850	•	•	138,209	276,201			
ì			1,653,288	1,686,398			
1851	_	_	54,596	105,115			
1852	•		233,501	4 17,742			
1853	•		59,321	130,986			
1854	:	:	43,260	61,849			
1855	:	:	87,605	88,801			
1856	•	-	50,832	269,657			
1857	:	:	82,863	263,426			
1858	•	:	89,458	455,136			
			650,936	1,822,712			

CUSTOMS.—The gross total amount of Customs Duties collected in the United Kingdom for the year ending March 31, 1859, was £24,155,852. The following is a statement of the several articles upon which the principal amount is obtained, to Dec. 1857, 1858, and 1859:—

1	1857.	1858.	1859.
ſ	£	£	£
1. Sugar	5,266,427	6,051,801	5,941,893
2. Tea	5,060,033	5,186,171	5,406,111
8. Tobacco and Snuff	5,258,489	5,454,216	5,552,347
4. Wines .	1,965,361	1,827,087	1,842,137
5. Spirits—Rum	1.878,424	1,396,267	1,459,796
6. , Brandy .	968,621	880,521	979,574
7. Corn	478,383	586,783	527,545
8. Coffee	456,805	442,120	429,339
9. Wood—Sawn and Split .	854,698	862,571	382,516
10. , Not Sawn or Split .	221,997	202,499	228,747
11. Silk Manufactures .	250,995	270,536	307.246
12. Currants	201,599	802,819	879,264
13. Molasecs	150,308	200.417	158,192
14. Butter	110,598	95,489	104,320
15. Raisins .	92,574	129,411	151,176
16. Cheese .	48,200	44,370	49,395
17. Miscellaneous	742,922	772,774	601,726
Gross Total	22,956,571	24,155,852	21,704,324

Of the above total amounts, the proportion collected from each division, with the proportion per cent. of the total amount collected in 1858, was as under:—

		Gross Receipta	Proportion per cent. of Total Amount.
London Liverpool 78 other Ports in England 26 , , , Scotland 19 , , Ireland	:	£12,382,061 8,632,508 8,669,895 2,366,440 2,265,458	51-0 15-0 15-2 9-4 9-4
Totals .		24,155,852	100-0

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The customs duties, except on some of the most important articles of consumption, have been gradually abolished, and in other cases materially reduced. The gross duties received in 1862 was almost wholly derived from the following

	ww.	_					
Cocoa		•		£16,861	Sugar and Melasses	٠.	. 6,641,281
Coffee		•		433,860	Tea .		. 5,582,793
Corn .	•			962,482	Timber .		229,234
Dried Fruits		•		872,461	Tobaceo .		. 5,714,448
Hops .	•	•		55,969	Wine .		. 1,123,605
Pepper Spirits	•	•	•	106,080	Other articles .	•	. 182,794
Spirite	•			2,622,728			
					Total		£23,993,546

Amongst the minor articles included in the last item were beer and ale, cards, chicory, hops, malt, vinegar, and plate, retained in the tariff simply for the purpose of countervailing imposts levied by the Inland Revenue on that class of articles produced or manufactured in this country. In this category are also included a few items which brought only trifling sums to the Exchequer, but which nevertheless are inadmissible free of duty because of the relation they bear to staple articles that contribute largely to the revenue, as for instance, arrowroot, pearl barley, biscuit, sago, smolina and starch, tapioca, vermicelli, and maccaroni, with others of a farinaceous character, all of which are assessed at the same rate as flour, preserved ginger and plums, marmalade, succades, and other such articles in which the saccharine element abounds.

Turning to 1851, a year of better fiscal results than that which preceded or succeeded it, we find that the customs revenue amounted to £22,258,301. At that period upwards of 400 articles were subject to duty on importation, and to that number should be added all unenumerated merchandise classed under the general denomination of "goods either in part or wholly manufactured and charged with an ad valorem duty of 10 per cent."

In 1862, notwithstanding the entire abolition of duties on all those articles, and great relaxations on others, the aggregate receipts of customs exhibit an amount greater by £1,735,245 than that of 1851. These figures and facts would seem to furnish a signal proof of the great resources and progressive wealth of the nation.

The gross amount produced by customs duties upon the principal and other articles of foreign and colonial merchandize in the last three years has been as follows:—

					1860.	1861.	1862.
					£	£	£
Cocos					14,506	14,902	16,361
Coffee		•			445,999	442,258	433,360
Corn			•		751,044	837,638	962,482
Fruits					362,589	346,818	372,461
Hops					9,671	99,620	55,969
Pepper					96,430	100,105	106,080
Spirits					2,531,482	2,641,498	2,622,728
Sugar					6,092,545	6,414,411	6,641,931
Tea			_		5,444,157	5,521,322	5,582,798
Timber a	nd ¥	Food .			804,457	246,814	229,234
Tobacco					5,674,054	5.604.085	5,714,448
Wine					1,174,105	1,219,588	1,128,605
Other art	icles				262,725	168,974	132,794
		Total		•	£23,165,764	£23,657,513	£28,993,546

Between the years 1847 and 1861, the customs duties repealed or reduced (deducting war duties imposed) amounted to £6,500,711. Deducting the charges for collection, the net revenue derived from customs articles in the last three years was as follows: 1860, £22,852,383; 1861, £23,446,526; 1862, £23,709,505.

98 The following comparative table will show the recent reduction of duties on the most important articles :-

		1846.	1863.
Cocos .		2d and 6d per lb.	ld per lb.
Coffee .		6d and ls ,	8d ,
Corn .		6d to 20s 4d per qr.	ls per qr.
Currants		23s 3d cwt.	7s per cwt.
Pige .		180 ,,	Free.
Raisins		7s 6d and 15e cwt.	Free.
Pepper .		6d per lb.	6d per 1b.
Rum .		Se per gall.	8s 3d per gall.
Brandy		22s 6d ,,	8a 6d ,,
Geneva		22s 6d ,,	8e 6d ,,
Sugar .		24s to 63s cwt.	19s 8d to 18s 4d cwt.
Tea .		2s ld per lb.	ls per lb.
Timber		28s to £2. 15s per load	£1. to £2, per load.
Tobacco		Se to 9e per 1b.	Se to be per lb.
Wine .		5e 6d per gall.	ls to 2s per gall.

A Statement showing the Gross Receipt and Net Produce of the Customs of the United Kingdom, from 1849 to 1859, with the Charges of Collection.

	Gross		Charges	Rate per Cent. of Collection.				
Years.	Receipt.	Drawbacka, Bounties, Re- payments on Over-entries, &c.	of Collections.	On the Gross Receipt.	On the Net Produce.			
	£	£	£	E a d	2 4 4			
1849	23,483,956	22,268,864	1.301,727	5 15 9	5 16 11			
1850	22,194,142	22,019,784	1,283,805	5 15 8	5 16 7			
1851	22,373,662	22,197,075	1,290,756	5 15 4	8 16 4			
1852	22,312,514	22,137,120	1,968,422	6 13 8	5 14 7			
1853	22,787,284	23,515,918	1,802,721	5 14 7	5 15 9			
Years ended	ı		li					
31st March.	i	<u> </u>						
1855	22,245,118	21,991.675	1,236,088	5 11 2	5 12 5			
1856	28,481,818	23,213,797	1,257,248	571	5 8 4			
1857	23,959,528	23,488,136	1,107,554*	4 19 5	4 14 4			
1858	23,603,770	23,275,748	843,757*	3 11 6	3 12 6			
1859	24,376,169	23,998,380	838,203°	889	3 9 10			

CUTCH.—The imports of cutch, which is chiefly used here as a tanning substance, are mixed in the Board of Trade returns with what is termed terra japonica, but is properly gambier, imported from Singapore. This is an inspissated astringent substance obtained from the Uncarla gambir, and comes entirely from the Straits settlements, while cutch comes from India. The imports of this misnamed terra japonica averaged about 9000 tons annually in the three years ending with 1859. The imports of cutch, which had been about 2400 tons in each of the previous two years, were in 1859 4515 tons. each of the previous two years, were in 1859 4515 tons.

DENMARK.-Differences which had existed for some time, and led to hostilities with Germany, were definitively arranged in the close of 1858, and, by decree of the 6th November of that year the constitutional law of Denmark, was withdrawn from the duchies of Holstein and Lauenburg. The population of Denmark Proper was, in 1855, 1,500,000, and of the three duchies about 1.000,000. The shipping belonging to Denmark Proper in 1857 consisted of 2651 vessels, measuring 65,909 lasts (of two tons): twenty-seven of these were steamers of 1837 aggregate horse power. The Duchies of Sleswick and Holstein had 2708 vessels. measuring 47,452 lasts; of these only eleven were steamers, of 508 horse power in all.

Of the carrying trade during the year 1856, 73 per cent. was conducted in Danish ships engaged in the export, and 41 per cent. in Danish ships engaged in the import trade. Of the trade with England, 62 per cent. was carried on in

Danish ships. The number of foreign ships engaged in the whole trade of Denmark in 1856 was 22,676, of 528,629 commercial lasts burden. The proportion of English ships was 979.

VALUE OF THE IMPORTS AND EXPORTS OF DENMARK.

					Imports.	Exports.
1847	•	•	•	•	£4,805,403	£3,451,591
1852	•	•	-	-	5,266,169	8,871,048

The whole import and export trade in 1856 amounted to about £11,428,927. We thus perceive that the trade of Denmark has been steadily and sensibly improving during the last ten years. Since the abolition of the Sound Dues (to which Great Britain paid, as her proportion of the redemption, £1,250,000) the importance of Denmark to the British wool and cotton trade has been greatly increased, and Copenhagen has become an entrepôt for Russian produce destined for England on the one hand, and for British wool and cotton goods on the other. Since the years 1854 and 1855, when the trade of Iceland and the Faro Islands was thrown open to foreign nations, another valuable market has presented itself to British trade. The most important export articles from these parts of the Danish dependencies being sheep, wool, tallow, salted fish, ponies, eider down, and cod-liver oil. The principal imports from England are coal, iron, salt, and manufactured goods. The exports from Denmark are chiefly live stock and agricultural produce. The distillation of brandy has of late years made rapid strides, while its exportation has correspondingly increased.

DOCKS.—The great extension of foreign trade and commerce has led to an enlarged demand for dock accommodation, and a very great extension has consequently been given to dock space in the principal ports, while new docks have been formed in many localities where none previously existed.

In 1850 there were 130 wet docks, including graving docks, in Great Britain and Ireland, which had cost in the aggregate upwards of £30,000,000, and covered a water area of 1000 acres. Since that period upwards of 500 acres more of dock accommodation has been formed.

I.-Docks of the Port of London.

In London there are about 30 wet docks, covering a water area of 336 acres, the property of six incorporated Companies, the aggregate cost of whose works exceed £9,300,000. These docks accommodate upwards of 9000 vessels, of an aggregate tonnage of about 2,700,000 tons, yielding an annual revenue in dues and warehouse rent exceeding £1,500,000 to the Companies, enabling them to pay dividends averaging from 3 to 5 per cent. per annum. The Victoria and Commercial Docks each paid 5 per cent. in 1888.

In 1850, the trade of the port having more than doubled, the Victoria Docks were projected, to meet the rapidly increasing requirements of the trade, and to accommodate the large steamers navigating the river. In 1849 the number of British and Foreign steamers which entered the port of London, exclusive of pleasure or passenger steamers, was 1353, with a tonnage of 300,000 tons. Many of these vessels could not enter the existing docks except at the expense of unshipping their paddles. Of 9567 ships in the foreign trade, measuring 1,819,171 tons, which entered the port of London in the year 1848, only 4915, measuring 1,172,707 tons, availed themselves of the accommodation provided by the existing docks. And in 1849, of 9970 British and foreign ships that entered the port, only 5025 made use of the docks.

The entire area comprised within the docks is about 200 acres, of which more than one-half, about 110 acres, is water space. This consists of the entrance, with its lock, the tidal chamber of 16 acres, and the main dock of 74 acres. The basin and dock are 4050 feet in length, and 1050 feet in width, at the level of high water mark. In addition to the quay room afforded by the sides of the

basin and dock, four jetties, each 581 feet long and 140 feet wide, project from the north side into the dock; these jetties, with the sides of the dock and of the basin, provide a length of three miles of quay space.

By comparing the appended returns, the progress of the Dock business of London, and the accommodation afforded to shipping will be readily seen.

Year 1850.	Water Area	Capital.	Ships Entered.	Tonnage.	Revenue.	Dividend.
St. Katharine London East and West India Commercial Bast Country	Acres. 11 39 113 57 1	£ 2,182,800 8,938,310 2,965,668 312,400 103,800	No. 703 1,255 2,546 640 214	Tona 152,046 349,384 480,183 174,910 46,500	231,558 457,397 420,000 17,000 4,300	*****
Totals .	313	8,673,978	5,264	1,202,828	1,130,249	1

Year 1858.	Water Area.	Capital.	Ships Entered.	Tonnage.	Cost per Acre.	Dividend per sun.
East and West India London . St. Katharine Victoria . Commercial East Country*	Acres. 112 82 11 110 70	2,065,668 3,938,810 2,152,809 200,000 514,410 103,800	No. 2,621 975 868 2,218 1,222 214	Tona. 817,320 403,146 201,798 814,186 401,470 46,500	8 18,443 123,072 186,640 8,181 7,348 103,800	6446
Total .	296	9,874,968	9,213	2,684,868	1	1

Comparative Statement of the Vessels and their Tonnage which entered the undermentioned Docks.

	1	1887.		1856.		1850.	
	Ships	Tons.	Ships.	Tons.	Ships.	Tons.	
East and West India . London . St. Katherine . Victoria .	3,668 979 944 1,782	842,572 390,759 201,941 594,773	3,621 975 803 2,318	817,820 403,146 901,798 814,136	882 993 2,416	369,312 207,066 756,012	
Total .	7,313	2,030,045	7,777	2,236,398	4,231	1,332,390	

The figures include not only loaded vessels from foreign ports, but coasters, colliers, light ships, and vessels returned from dry dock.

The undermentioned account gives the number and tonnage of loaded vessels from foreign ports which entered the three docks named, as extracted from the Customs' published list during the years specified, viz.—

^{*} Not being able to get a return for the East Country Dock, I have assumed merely the same number of ships and tonnage as entered in 1850.

		1858.	1859.		
İ	Ships.	Tons.	Ships.	Tons.	
London St. Katharine Victoria	945 477 672	884,79 <u>4</u> 189,27 2 896,919	899 495 421	886,932 144,767 234,959	

The dock area is now deemed to be insufficient. The want of greater accommodation in the existing docks for the foreign and home trade of the port of London; the all but entire deficiency of dry docks; and the crowded state of the navigation of the river have threatened to drive from the metropolis to rival ports a large proportion of the shipping which enters the Thames. During the last thirty years the British tonnage entering the port of London has increased from 784,000 tons to 1,888,000, and in the same period the Foreign tonnage has increased from 215,605 to 1,073,000 tons, or nearly five times the amount of former times; the greatest increase has taken place within the last eight years, mainly owing to the repeal of the Navigation Laws. But while all this vast increase has been going on, no proportionate extent of dock accommodation has been provided, and the Thames—the great highway of our trade and commerce—like some of the principal street thoroughfares of the metropolis, has become inconveniently crowded with traffic, so much so as to render its navigation tedious and expensive.

The appended returns will serve to convey an idea of the present aggregate foreign trade of the United Kingdom, from which it will be seen that nearly 15 millions of tons weight of sea-borne cargo are annually conveyed to and from our ports.

IMPORTS.

Date.	No. of	Register	Tons Weight of
	Vessels.	Tonnage.	Cargo carried.
1852 1853 1854 1855 1856 1857	38,061 42,876 41,591 40,980 30,604 31,693 34,591	7,887,447 8,948,106 9,161,366 8,951,239 8,241,703 8,732,180 8,816,133	6, 169, 599 7,525,063 7,290,996 6,254,289

EXPORTS.

Date.	No. of	Register	Tons Weight of
	Vessels.	Tonnage.	Cargo carried.
1852 1853 1854 1855 1856 1857 1858	89,361 44,779 48,494 42,597 41,355 44,401 42,834	8,242,703 9,447,104 9,607,721 9,638,281 9,662,518 10,342,399 9,936,705	6,418,245 7,316,457 7,639,478 8,370,363

In 1750 there cleared from the port of London 179,860 tons of shipping, but the entries in that year cannot be ascertained. In 1800 there entered 796,632 tons, and cleared 729,554 tons; and in 1857 the entries were 2,834,107 and the clearances 2,143,884 tons.

Entries of Vessels at the Port of London, distinguishing the Foreign, Coasters, &c.

	1820.		1	830.	1840.	
	No.	Tons.	No.	Tons.	No.	Tons.
Foreign Trade: British Foreign	8,854 856	655,239 122,619	8,910 1,268	744,229 207,500	4,518 2,215	930,291 333,929
Irish Trade Colliers Coasters	420 5,921 10,676	no record	797 6,944 11,816	105,409 1,418,248 918,049	1,000 8,970 11,643	149,755 1,768,301 982,757
Fishing Vessels.	4,949	"	4,851	no record	8,588	no record

		1850.	1857.		
	No.	Tonnage.	No.	Tonnage.	
Foreign Trade: British Foreign Irish Trade Coasters and Colliers Fishing Vessels	6,499 8,415 502 21,258	1,376,714 528,234 125,862 3,125,056 no record	6,570 4,189	1,806,854 1,025,253	

The following series of tables will mark the progress of the trade with the British Colonies from the Thames in the last thirty years:—

Statement of the Number and Tonnage of Vessels which entered the Port of London with Cargoes from the Colonies and Dependencies of England in the years 1828, 1837, 1847, and 1857.

	1	828.	1887.		
Colonies.	Ships.	Tons.	Ships.	Tons.	
Gibraltar Malta Possessions in Africa Do. Asia and Australia N. American Colonies West Indies Channel Islands	11 5 92 131 210 506 178	1,775 586 93,678 57,140 69,416 147,469 14,181	27 8 140 223 258 887 461	6,783 425 31,308 93,110 92,504 103,574 37,671	
Ĭ	1,130	814,483	1,489	871,875	

1847.

Colonies.	Bri	tish.	For	dgn.	Total Tonnage.
Gibraltar Malta Possessions in Africa Do. Asia and Australia N. American Colonios West Indies Channel Islands	Vessels. 9 80 214 437 462 369 503	Tons. 818 5,461 58,072 209,211 205,935 111,340 52,077	Vessels. 4 2 8	Tona. 1,027 914 2,606	818 6,488 58,072 210,125 208,541 111,340 52,077
Total .	2,024	642,914	14	4,547	647,461

1857.

Colonies.	British.		For	eign.	Total Tonnage.
Gibraltar, Malta, and Ionian Isles Possessions in Africa E. Indian and Austra-	Vessels. 22 166	Tons. 7,528 52,257	Vessels. 2 7	Tons. 340 2,198	7,868 54,455
lian Colonies, and Falkland Isles . N. American Colonies West Indies Channel Islands .	491 192 391 591	328,655 86,775 116,072 72,461	49 143 21	86,662 90,731 7,637	365,317 177,506 123,709 72,461
	1858	663,748	222	137,568	801,816

An Account of the Number of Vessels and their aggregate Tonnage that have ENTERED the Port of London from Foreign parts, distinguishing the British from the Foreign, since 1820.

	BR	TISE.	For	eign.	Т	OTAL.
	Ships.	Tons.	Ships.	Tons.	Ships.	Tons.
1820	3,354	655,239	856	122,619	4,210	677,858
1821	3,000	585,994	571	89,073	8,571	675,067
1822	8,280	603,167	597	106,099	8,827	709,266
1823	8,031	611,451	865	161,705	8,896	778,156
1824	8,182	607,106	1,648	264,098	4,775	871,204
1825	3,989	785,565	1,743	802,122	5,732	1,087,687
1826	8,495	675,026	1,586	215,254	5,081	890,280
1827	4,012	769,102	1,584	221,008	5,546	990,110
1828	4,084	767,212	1,303	195,929	5,887	963,141
1829	4,108	784,070	1,300	215,605	5,408	999,675
1830	8,910	744,229	1,268	207,500	5,178	951,729
1831	4,140	780,988	1,557	269,159	5,697	1,060,147
1832	3,274	640,057	886	154,514	4,160	794,571
1833	3 421	678,289	1,061	175,883	4,483	854,172
1834	8,786	735,693	1,280	216,063	5,068	951,756
1835	3.780	740,255	1,057	188,898	4,837	929,148
1836	3,845	772,046	1.465	255,875	5.310	1,027,921
1837	4.079	821,788	1,547	240,135	5,626	1,061,923
1838	4,366	893,925	1,727	277,902	6,093	1,171,827
1839	4.880	988,867	2,875	857,163	7,255	1,345,030
1840	4.547	934,660	2,221	854,456	6,768	1,289,116
1841	4,649	999,259	1.099	317,608	6,641	1,316,867
1849	4.767	1,002,453	1.640	281,468	6,407	1,283,921
1843	4,589	1,022,550	1,633	295,121	6,222	1,317,671
1844	4.741	1,008,463	9,144	858,846	6,885	1,361,809
1845	5,128	1,109,387	2,489	893,104	7,562	1,502,491
1 1846	5,228	1,134,646	2,488	894:581	7,711	1,529,177
1847	6,271	1,436,986	8,132	494,791	9,408	1,931,777
1848	6,489	1,387,070	8,078	439,111	9,567	1,819,171
1849	6,923	1,445,319	8.047	445,905	9,970	1,890,524
1850	6,499	1,376,714	8,415	528,284	9,914	1,904,948
1851	6,593	1,449,353	8.748	720,969	10,841	2,170,322
1852	6.028	1,389,711	8,958	770.446	9,986	2,160,157
1853	6.261	1,524,219	5,502	1.069.894	11.768	2,594,113
1854	6,151	1,654,234	4.792	1.013.589	10,943	2,667,723
1855	5,745	1,528,497	4,025	892,089	9,770	2,420,586
1856	6.164	1,699,423	3,758	945,860	9,922	2,645,283
1857	6,570	1,808,854	4,189	1.025,253	10,759	2,834,107
1858	6,804	1,888,261	4,368	1,073,048	11,172	2,961,309
1000	4,000	1,000,201	2,000	1,010,01010	1,1,1,2	2,501,003

From the foregoing returns it will be seen that in 1820 the number of ships which entered the river was 4210, measuring 677,858 tons, of these 856 ships and 122,619 tons were foreigners. In 1830 the total number were 5178 ships and

951,799 tons, of which 1268 ships and 207,500 tons were foreigners. In 1840, out of 6768 vessels and 1,289,116 tons, 2221 ships and 354,456 tons were foreigners. In 1850 the entries were 9914 ships and 1,904,948 tons, and of 1970 vessels and 528,274 tons sailed under a foreign flag. In 1855, of 9770 vessels and 2,420,586 tons, 4025 ships and 829,089 tons were owned by foreigners. These figures show incontrovertibly how rapid and extensive has been the increase of the foreign tonnage employed in this port, for while in 1820 the foreign ships numbered only one-fourth of the entire entries, in 1855 they had reached four-fifths, while more than half the tonnage employed was foreign bottoms. The whole commerce of the country in 1859 was carried on by 9,089,550 tons of shipping entered, of which 3,700,597 tons were foreign vessels, and of 10,242,624 tons cleared upwards of 4,000,000 were foreign bottoms.

The aggregate number of vessels, sailing and steam, that entered the port of London in 1857 from foreign countries and British possessions, exclusive of colliers, coasters, and fishing vessels, was 10,759 ships, registering 2,834,107 tons, and in 1858, 11,172 of 2,961,309 tons.

The progressive increase of shipping movements in the port is shown by the following figures:—

Aggregate Tonnage Entered.

1827			990,110
1837			1,061,928
1847		•	1,981,777
1857	:		2,884,107

Showing a progressive decennial increase of late years of about 900,000 tons.

The following returns show the Number and Tonnage of British and Foreign Vessels which Entered the Port of London with Cargoes from Foreign Ports, distinguishing the Countries whence they arrived:

1887.

	Ba	TMH.	Foreign.		
COUNTRIES.	Ships.	Tons.	Shipa.	Tons.	
Russia	431	100,290	57	20,587	
Sweden	4	750	88	28,491	
Norway	ī	163	118	34,819	
Denmark	5	829	92	7,218	
Prnesia .	132	19,561	203	45,267	
German States	175	50,314	242	16,353	
Netherlands	524	78,489	270	25,585	
France	301	44,357	811	14,871	
Portugal, Azores and Madeira	806	29,748	12	1,413	
Spain and Canaries	252	29,889	44	4.973	
Italian States	119	17,535	18	4,701	
Ionian Islands	84	4.576	_	_	
Turkey and Continental Greece	61	9,333	_	_	
Morea and Greek Islands .	20	2,816		l –	
Egypt	1	148	_	-	
Tunia, Barbary, and Morocco	14	1,626	_	_	
Madagascar .	8	581	_	_	
Foreign Possessions in Asia	ğ	2.899	1 3	508	
China	82	21,275	_	_	
Northern States of America	15	4,518	53	27,924	
Foreign West Indies	28	4,539	17	8,712	
Foreign Colonies in America	85	16,487	5	1,129	
The Whale Fisheries .	21	6,911	_	-	
Total	2,568	447,624	1,527	237,051	

1847.	Bar	TISE.	Foreign.		
COUNTRIES.	8hips.	Tons.	Ships.	Tons.	
Russia Sweden Norway Denmark	719 11 3 40	155,752 1,108 240 6,518	814 197 164 587	55,961 49, y98 47,462 39,938	
Prussia German States Holland	281 193 588	\$2,066 51,817 116,159	362 324 286	70,844 22,600 21,720	
Belgium France Portugal, Azores and Madeira Spain and Canaries	223 693 850 245	42,467 88,880 36,095 24,471	188 825 18 50	20,787 23,089 1,761 5,120	
Italian States Ionian Islands Greece	197 89 50	16,902 4,136 7,320	45	210	
Moldavia and Wallachia Turkish Dominions Syria and Palestine Egypt	18 85 1 106	2,716 14,538 186 28,652	26 9 15	5,196 2,595 3,330	
Tunis, Algeria and Morocco . Africa, Foreign Possessions . Asia China	12 4 83 62	1,579 777 12,122 28,347	9 8	756	
Foreign West Indies America, United states Central and South .	127 14 188	84,054 81,322 50,223	44 180 11	9,259 92,248 2,637	
The Whale Fisheries	16 4941	5,806 793,608	3091	487,797	

1857.	Bar	Tish,	Former.		
COUNTRIES.	Ships.	Tons.	Ships.	Tons.	
Russis, Northern Ports ,, Southern Ports Sweden .	547 78 128	181,962 97,835 80,462	418 81 5 09	77,845 28,732 111,281	
Norway . Denmark . Prussia .	96 898	256 22,299 75,531	\$07 \$55 409	66,804 44,817 80,142	
Germany . Holland . Java	208 509 7	74,889 150,830 8,319	347 316	58,014 47,249 2,195	
Belgium France Pondicherry Portugal, Azores and Madeira	411 863 8 263	79,878 178,100 1,659 89,388	184 854 —————————————————————————————————	86,119 27,674 6,717	
Spain and Canaries . Philippine Islands . Italian States .	245 8 154	89,701 4,034 23,504	52 6 56	7,921 4,128 11,783	
Greece Turkey Wallachia and Moldavia	58 55 38	10,515 15,836 7,110	16 15	330 8,514 8,684 325	
Syria Egypt Morocco United States	26 44 80	815 8,331 6,462 23,571	18 — 159	6,104 129,450	
Cuba and Foreign West Indies Central and South America Chinese Empire	70 199 65	90,353 101,818 43,087	115 129 11	83,586 71,917 8,670	
Siam East Coast of Africa West Coast, Foreign Possessions	1 1 97	284 847 6,072	_ 9	2,157	
South Sea Islands . Other Islands . Whale Fisheries .	1 1 8	177 819 917	=	=	
Total .	4542	1,114,909	8938	870,531	

There also entered in ballast 175 British ships, measuring 30,197 tons, and 29 foreign ships of 17,184 tons.

II. THE LIVERPOOL DOCKS.—The progress of dock accommodation in Liverpool has been also very extensive of late years, the trade of the port having risen to an enormous aggregate, nearly the whole of the cotton imports, and the principal portion of the American timber and emigration trade centring there, whilst it is also one of the chief steam-shipping ports of the kingdom. Ten years ago there were fifty docks of all sorts, and basins covering a water area of about 200 acres, estimated to have cost upwards of £10,000,000. Within the last few years, nine docks and graving docks have been constructed, and about 150 acres more of water space added to the accommodation of the port. Liverpool owns about 1,000,000 tons of shipping, sail and steam. The entries of vessels from foreign ports in 1858 amounted to 2,320,334 tons, exclusive of coasters. The value of the exports of British produce from Liverpool in that year was about £51,000,000, against £29,000,000 from London. The dock dues were further reduced in 1844 and 1848. The Albert Dock was opened in 1845. In 1849, £314,857 was expended in dock improvements, and in 1855, £328,465, in each case more than a year's revenue. About £1,000,000 has been expended on the Birkenhead Docks, which comprise the Morpeth Dock with 3½ acres, Egerton, 3½, the Great Float 150, and the Deep Water Basin 37 acres. Since the last edition of this Cyclopædia was printed, the following additions have been made to the dock accommodation: Albert Dock, 8 acres; the North, 55 acres; Toxteth, 2 acres; Harrington, 1 acre; South Dock, 16 acres; and Duke's, 2 acres; besides the Birkenhead Docks already mentioned. The following shows the extension of the trade of Liverpool:—

	Vessels.	Tonnage.	Dock Dues Received.
			£
1841	16,108	2,425,461	175,506
1842	16,458	2,425,319	177,232
1843	16,606	2,445,978	188,286
1844	18,411	2,632,712	185,164
1845	20,521	3,016,531	223,247
1846	19,951	8,096,444	. 213,423
1847	20,899	3,351,539	944,435
1848	20,311	8,284,963	197,617
1849	20,783	8,639,146	224,224
1850	20,457	8,536,387	211,743

III. Docks at other Ports of the United Kingdom.—Although it is impossible to give detailed accounts of all the public works of the kind that have been lately constructed, a few of the principal may be mentioned.

Southampton. — In 1842 new docks were opened at this port. The open dock or great tidal basin has 16 acres surface of water, with a depth of 18 feet at low water, and 31 feet at high water. The entrance from the 1tchen estuary is 150 feet wide, from the north side of which is a jetty 180 feet long, and 25 feet wide, where a large trade is carried on with the Irish and West of England steamers, and sailing vessels from France, with eggs, butter and poultry; which trade has wonderfully increased of late, owing to the facilities afforded in the rapid transit to London by rail. At the East Quay is erected one of the finest pair of sheers in England, which is worked by steam power, and capable of lifting 50 tons. The quays round the open dock measure 3300 feet, and are capable of affording quay berths for ten ships of the largest tonnage. On the south side are the entrances to three graving docks, viz. the Eastern Dock, the Middle, and Western Docks.

	Eastern Dock.	Middle.	Western.
Length from gates to head Length on blocks Width of gates Depth of water over blocks at ordinary springs Depth at neaps	ft. 538 425 80 25 21	ft. 282 283 51 14	ft. 346 343 66 20 16

From the increased trade and demand for quay berths in 1856, an extensive jetty was erected on the south side of the open dock, at which two of the largest steamers can be accommodated to land and ship cargoes.

The inner dock has 10 acres surface of water, and the entrance thereto is 56

feet wide, and as this entrance is provided with gates, there is always a depth of water of 32 feet. The quays round this dock measure 1810 feet, and at the west end four jetties are run out, 190 feet long, and 25 feet wide, at which eight vessels of the largest tonnage can lie to land or take in their cargoes

The inner dock is capable of affording quay berths to fourteen of the largest class steam ships, and is also provided with extensive import and export sheds, warehouses and vaults.

Southampton.—The following return shows the

TONNAGE of VESSELS which ENTERED the SOUTHAMPTON DOCKS during the Year 1859.

From East Indies and Aus	dralia	min A	love	måel				Tons. 98,831
West Indies			LIVA		- •			79,887
Brazils .	•		•		•	_		22,577
Peninsular	•			•				47,361
United States .	•		•		•		•	56,734
France .	•	•		•		•		75,415
Channel Islands	•				•		•	74,876
Cape of Good Hope		•		•		•		71,61
Ireland, &c.	•		•		•		•	98,309
To	tal ster	un to	nna	ge				561,151
Sailing ships entering the	Docks	duri	ng ti	e ye	ar 18	59	•	95,012
Total sailin	g and	stean	a shi	рв				656, 168

QUANTITY OF SPECIE LANDED and SHIPPED at SOUTHAMPTON DOCKS during the Year 1859.

Landed from East Indies and West Indies . Brazils . France and Am		•	rane:	an	;	:		Packages. 594 9,288 521 1,997
Shipped to the East Indies West Indies	:		:		:		÷	12,400 56,068
Brazils	•	•	•	•	•	•	•	469 56 839

South Shields.-The Tyne Docks, formed at South Shields, inclose an area of 179 acres, of which 50 acres are water area, the depth being 24 feet 6 in, at an average spring tide. The entrance basin is 91 acres in extent, with a depth of 25 feet for a width of 200 feet in the centre of the channel, gradually shoaling to the sides. One entrance has a width of 80 feet, and there is a lock 300 feet in length and 100 feet in width, with gates 60 feet wide.

In 1858 the quantity of coal shipped at South Shields amounted to 1,203,524 tons, and it is all shipped from the Tyne Docks.

At Sunderland there is a dock with a tidal and half-tidal entrance, occupying a water area of 19 acres. A new deep-water dock is proposed to be formed at the Low Lights in the river Tyne. From the Northumberland docks one million and a half of tons of coal are now shipped annually.

Sunsaca. —On the 23rd September, 1859, the new South Docks were opened at Swansea, consisting of 13 acres, having 4800 feet of quay wall, with a depth of water throughout of 24 feet; in addition to which is a half-tide basin of 4 acres, with 1600 feet of quay wall, communicating with the dock by a lock 300 feet by 60 feet. The tounage entering this port has risen from 270,000 tons in 1851 to upwards of 500,000 tons in 1858.

The inner basin is excavated to a depth of 29 feet 6 inches, the entrance to 28 feet; but the foundations of the walls are of sufficient depth to allow of an increased deepening of the entrance channel to an extent of about 3 feet. The half-tide basin will accommodate steamers of the largest size. The entrance is 70 feet wide, being 15 feet wider than the entrance of the Bate Dock recently

opened at Cardiff.

West Hartlepool. — Capacious wet docks, 350 and 320 feet long, with large graving docks, were opened in this harbour on the 1st June, 1847, and the number of ships which entered to load or for refuge have increased from 1242 of 169,021 tons in 1848 to 4807 vessels and 589,990 tons in 1858. The coals and coke shipped thence were only 169,021 tons in 1848, whilst in 1858 the quantity had risen to 770,361 tons. Besides the tidal harbour, 44 acres water space, the docks, building, timber, and bond yards, cover an area of upwards of 175 acres.

At Goole there are four wet docks, covering 10 acres of water space, besides a

dry basin and patent slip.

At Great Grimsby there is an enclosure upwards of 11 miles in extent, consisting of quay and water space, enclosing 150 acres of ground claimed from the sea. There is a cargo dock of 30 acres, and a tidal basin of 20 acres water area,

with locks, graving docks, &c.

At Middlesborough there is a wet dock of 9 acres water area, opened in May, 1842, in which upwards of 300 vessels are annually accommodated, taking

away above half a million tons of coal.

In Aberdeen there is a capacious dock of 34 acres, called the Victoria Dock. At Dundes the completed docks and tidal harbours afford water accommodation of 42 acres.

At Greenock there are three tidal harbours of 18; acres water area, and at Montrose there is a wet dock of 4 acres.

A graving dock for ocean steamers was completed in 1859 at the mouth of the Liffey, near Dublin.

EARTHENWARE-In a lecture delivered before the Society of Arts in April, 1860, by Mr. Goddard, some interesting details were furnished on the Lambeth stoneware manufacture. Drain pipes are now a large article of consumption. At one time there were 40 kilns in Lambeth burning these pipes, and turning out about 60 miles per annum. The laboratory is supplied with stoneware stills and jars from 1 to 300 gallons, condensers, worms, pipes and pumps for conveying acids, jugs and ladles for lifting, and funnels for straining. Candle makers are largely supplied with bottles, pickle jars, jam jars, ginger beer, potash, and porter bottles. Distillers, wine and spirit merchants have barrels, bottles or cans, flat bottles, &c. The domestic uses are more numerous than select, Staffordshire ware being more approved, except for beer muga, blacking bottles, warmers, butter pots, and others of a like character.

Druggists' pots, tobacconists' jars, insulators for telegraphic wires, stands for aquariums, are all made of stoneware, besides a numerous array of vessels and apparatus for individuals of all trades and requirements. There are now 70 kilns in Lambeth, turning out each perhaps on an average £50 per kiln per week, and consuming upwards of 20,000 tons of coals per annum. Twenty-three thousand tons of clay are annually changed into useful articles, giving employment to more than 800 persons, and the returns of the Lambeth potters cannot be estimated at less than £150,000. In the whole trade some 12 miles of sewer and drain pipes are turned out per week, and about 1000 soil pans.

The estimated weight of the earthenware of all sorts manufactured at the various potteries in the United Kingdom in 1850 was 160,000 techajf. The consumption of gold alone in the embellishment exceeds £40,000 per annum. The average value of exports of earthenware and porcelain from the United Kingdom. dom in the three years ending 1859 was £1,300,000, of this fully one-third goes to the United States. In 1843 the value of exports of earthenware was only £573,000

EAST INDIA COMPANY.—The functions of this Corporation are now wholly political, being jointly managed by the Board of Control, under a Secre-

tary of State appointed for India, and the Court of Directors. The Act of 16 and 17 Vict. c. 95, which came into operation on the 30th April, 1854, made material alterations in the constitution of the Directors by vesting in the Crown the appointment of some of the directors. By that Act the number of Directors was reduced to eighteen; in lieu of thirteen directors ten may act; and in all dispatches and written documents, instead of the signatures of a majority of the directors, those of the chairman and deputy chairman, with that of the senior member of the Court, or any two of them, countersigned by the secretary or deputy secretary, suffices. Before the second Wednesday in April, 1854, the Queen was to appoint three of the first directors for two, four, and six years; all the directors appointed by the Queen to be persons who have served ten years in India, either in the service of the Crown or of the Company. In the month of March, 1854, the existing directors, and those out by rotation in April, 1853, had to appoint from their own body fifteen of the first directors—five for two years, five for four years, and five for six years; such fifteen directors, with the three directors appointed by the Crown, constitute the direction of the Company. The directors appointed by the Queen may be increased to six, casual vacancies may be supplied by the Crown until those not so appointed are reduced to twelve. may be supplied by the Crown until those not so appointed are reduced to twelve. Vacancies in the number of Crown directors, or of the Company's directors, to be filled up by the Crown, or the Company. Directors to be appointed for six years, and to be re-eligible. On the expiry of terms of office, biennial elections to be holden on the second Wednesday in April. Six of the fifteen directors first appointed by the Company were to be persons who had served ten years in India. Qualification by the possession of India stock, £1000 stock to be deemed sufficient. Existing rights of patronage ceased, and became subject to the Board of Control. Any natural-born subject of the Queen desirous of being admitted into the college at Haileybury, or of being appointed an assistant surgeon in the Company's forces, may be admitted as a candidate for such admission or appointment. Regulations are to be made by the Board of Control, and also respecting admissions into the military seminary of Addiscombe; persons qualified and entitled only according to the regulations to be appointed to the civil and military services of the Company. Engineers to be appointed by the Board of Control. The debts and liabilities of the Company are all charged on India. The dividend of 101 per cent. on the capital is to be paid in England out of the revenues of India; and a security fund is established for its guarantee. The dividend is redeemable by Parliament at any time after April, 1874, on payment of £200 for every £100 stock.

The East India territories annexed to the British dominions since 1849 have been Jeitpore (Bundelcund), Sumbulpore (Bengal), Bughut (Cis-Sutlej Hill States), part of Sikkim (N.E. India), Oodeypore (S.W. frontier of Bengal), Pegu (Martaban and the Tenasserim Provinces), the territory resumed from Meer Ali Morad, one of the Ameers of Scinde; the country of Jularam Sonaputtee and Northern Cachar, the Nagpore territory, Oude, Jhansi (Bundelcund), and Boodawul (Candeish). The area of these States occupies a space of 118,968 square miles. The reasons for annexation were partly failure of heirs and partly misconduct towards the British Government. Pegu, conquered from the Burmese,

includes 2306 square miles and 133,000 souls.

The Indian finances, debt, &c. may here be treated of, reserving for the article INDIA those details more especially relating to shipping and commerce. On the 30th April, 1857, there were in India 281,569 troops, of which 254,286 were Company's troops, and 27,283 royals. Of the Company's troops, 150,036 were in Bengal. The mutiny in India, and the heavy expenses arising therefrom interfered materially with the progress of revenue collection, and entailed a heavy delt on the country. The various aggressive and defensive wars have largely added to the Indian debt. Thus during the Nepaul and Mahratta wars from 1815 to 1820, there was an aggregate deficit in expenditure over revenue of nearly £5,500,000. In the first Burmese war and the siege of Bhurtpoor, from 1825 to 1827, of £13,500,000.

The Affghan, Scinde, and Gwalior wars, 1838 to 1844, caused a deficit of

nearly £9,000,000; the first Sikh war, 1846 to 1848, of about £3,000,000; and the second Sikh war of £1,500,000; the second Burmese war of about £3,500,000; while the mutiny led to a deficiency of upwards of £30,000,000. The debt of the Government of India, which, on the 30th April, 1834, amounted to £41,350,952, and on which interest was payable of £1,959,594, had risen, in April, 1860, to £97,851,807, with interest payable amounting to £4,461,029.

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RETURN of all STOCKS, LOANS, DEBTS, and LIABILITIES chargeable on the EAST INDIA REVENUES, at HOME and ABROAD, made out for England to 31st December, 1859; for India to 30th April, 1858.

	Ras	INTERED D	EST.	LOANS			
IMDIA.	Bearing Interest.	Not Bearing Interest.	Total.	Bearing Interest.	Not Bearing Interest.	Total.	
Government of India Bengal N. Western Provinces Punjaub Madras Bombay	£ 50,776,151 — — — 23,450	£ 52,687 ————————————————————————————————————	£ 50,828,788 — — — 87,824	£ 2,803,738 50,699 869,709 562,879	£ 85,966 — — —	£ 2,389,684 50,699 869,709 563,379	
	50,799,601	66,511	50,866,112	8,286,515	65,966	3,372,471	
	Tz	BASURY NO	rea.	SERVICE FUEDS.			
Government of India Bengal N. Western Provinces Punjaub Madras Bombay	1,037,618 — — — — 153,100 2,550	896 — — — —	1,038,509 — — — — — 158,100 2,550	2,479,189 — — 751,774 1,569,308	115,939 — — —	2,595,078 — — 751,774 1,569,306	
İ	1,193,263	896	1,194,159	4,800,221	115,939	4,916,160	
:	B	ILLS PATAB	LB.	AND	DEPOSITS MISCELLAN	BOTS.	
Government of India Bengal N. Western Provinces Punjanb Madras Bombay	111111	1,083,421 25,005 488,014 126,702 109,511 522,539	1,083,421 25,005 488,014 126,702 109,511 522,539	3,348 160,553 20,000 	4.327,054 1,580,604 1,340,531 828,020 427,378 698,234	4,330,402 1,741,157 1,360,531 828,020 537,369 925,255	
	_	2,355,192	2,355,192	520,913	9,201,821	9 722,734	

Return of all Stocks, Loans, Debts, and Liabilities chargeable on the East India
Revenues, at Home and Abroad—continued.

	TOTAL					
India.	Bearing Interest.	Not Bearing Interest.	Total.			
Government of India Bengal N. Western Provinces Punjaub Madras Bombay	£ 56,598,979 10,553 70,699 369,709 1,600,694 1,798,879	£ 5,665,908 1,605,609 1,828,545 964,729 550,763 1,220 773	£ 62,265,182 1,766,162 1,769,244 1,324,431 2,151,457 3,019,652			

ECU

In England there were the following liabilities:

East India Bonds			:	:	:	£4,979,517
East India Debentures				•	•	14,956,000
India 5 per cent. Stock	•				•	4,999,000
Owing for Exports						286,826
Warrants for various Pay				nge outsta	ading	
Pay-Office Demands and .				٠.	•	592,740
Capital of Indian Railwa	y and othe	r guare	inteed	Companies	10-	-
maining in the Home T	reasury, a	fter dec	lucting	g Sums (pe	rtly	
estimated) drawn by th	em in Ind	ia.	•		•	4,087,080
Miscellaneous .			•			343,227
			•			
		Take?		-		£90 E07 097

The above is exclusive of the charge upon the revenues of India, under the Act of 3 and 4 Will. IV. cap. 83, of the Dividend at the rate of £10. 10s. per cent. per annum, on the sum of £5,000,000, the capital stock of the East India Company, which is subject to redemption by Parliament on payment to the Company of £200 sterling per £100 stock.

There are also contingent liabilities in respect of interest-guaranteed Indian Railway and other Companies, and of Repayments to them of Capital supended; but no estimate can be formed of the amount of these liabilities.

India Office, 31st January, 1860.

GEORGE FRIEND, ACCOUNTANT-GENERAL,

In examining the Indian Expenditure we find that in the seven years ending with 1858 the disbursements were under the following heads:

	Aggregate for 7 Years.	Annual Average.
Civil and Political Establishments Judicial and Police Charges Roads and Public Works Military Charges, including Buildings Navy and Marine Charges Mint Charges Interest on Debt	2, 17, 918, 554 18, 066, 936 9, 644, 377 80, 678, 496 4, 373, 669 520, 869 16, 158, 356	£, 2,559,793 2,583,848 1,377,766 11,554,071 624,810 74,410 2,308,336
Total Expenditure in India	2 147,581,257	21,063,036

Besides the foregoing sum, £22,764,660 was expended in England, disbursed as follows, making a total expenditure of £170,345,917 in the seven years, or an average expenditure of £24,835,181.

CHARGES IN ENGLAND.	Dividends to Proprietors of East India Stock.	Interest on the Home Bond Debt.	Establishments at Home, Civil, Military, and Maritime, Pensions, Recruiting, and Miscellaueous Expenses.	All other Charges.	Total
	£	£	£	£	£
1851-52	625,059	121,022	490,214	1,270,082	2,506,377
1852-53	634,070	117,509	503,162	1,442,747	2,697,488
1853-54	632,970	112,012	495,648	2,021,659	3,262,289
1854-55	628,335	153,518	546,216	1,683,666	8,011,735
1855-56	632,689	152,017	493,834	1,986,089	8,264,629
1856-57	62 7,898	155,494	483,778	2,262,508	3,529,673
1857-58	696,860	159,165	764,782	2,941,662	4,492,469
	4,407,876	970,787	8,777,634	13,608,413 Average	22,764,660 8,252,094

ECUADOR.—The population of this South American Republic is now 987,000 souls. Its agriculture, commerce, and general trade are steadily in-

creasing. The value of the exports now averages half a million sterling; they consist chiefly of cocoa, about 14,766,000 lbs.; straw hats, 32,255 dozen; hides, raw and tanned; tobacco, 5,151 cwts.; bark, about the same quantity; orchilla weed, 22,600 cwt.; caoutchouc, 748 cwt.; timber, sarsaparilla, coffee, &c. The trade with Panama, carried on by means of the steam packets which touch at Guayaquil, is rapidly increasing. The decimal system was adopted for monies, weights, and measures, in Oct. 1858.

The annual revenue and expenditure of this State are such about 2000 constant.

The annual revenue and expenditure of this State are each about £200,000. The foreign debt of Ecuador amounts to £1,824,000, being the portion of the debt of Colombia assigned to this State, when it became an independent province, and the accumulated arrears, besides which it has an internal debt of about £130,000.

The progress of the external trade of this republic is shown by the following movements of shipping and statistics:

	F.74	IKIBO AT THE	FURT UF	GUAL	rantr.	
	No.	Tonnage.			No.	Tonnage.
1852	175	21,746	i	1856	216	42,612
1853	245	27,768	L L	1857	257	46,199
1855	246	19,198	ſ	1858	190	42,913

The quantity and value of the several articles of domestic produce imported from Guayaquil in 1858 were as follows:

Articles.			Quantity.		Value.
Cocca		Quintale	198.661		£264,748
Straw Hats		Dozens	24,519		73,557
Hides, Tanned		No.	20,465		12,279
Tobacco	-	Quintals	2,072		10,360
Sarsaparilla		•	944		2,832
Tamarinda	-	**	787		918
Coffee	-	**	923		2,000
Orchilla		**	16,111		10,740
Bark	•	11	5,333		15,999
Timber	_	Logs	17,844		26,766
Canes	•	Each	72,600		2,420
Mangroves	•	Poles	2,868		358
Fire Wood	•	1000	_,,,,,		1,604
India Rubber	:	Quinta ls	1,208		2,416
					496,997
Specie				-	46,941
Gold Dust				•	386
GOM DES				•	000

£474,894 VALUE of the PRINCIPAL and other ARTICLES IMPORTED into the PORT of GUAYAQUIL in the Years 1857 and 1858.

Articles.			1857.	1868.
W			£	£
Manufactures: - Cotton .	•	•	193,728	184,761
" Linen	•	•	92,161	22,796
, Woollen .		•	122,938	51,076
Silk and Raw			81,616	12,805
Hosiery			14,381	9,588
Thread and Tape			12,422	4,940
Wearing Apparel		-	9,684	10,731
Hardware	:		21,757	27,885
Metals:-Iron, Copper, Lead, &c			7,373	15,936
Earthenware and Porcelain	•	•	5,729	8,745
Glass	•	•	4,974	13.830
Sosp, Candles, Wax, &c.	•	•	10,000	28,769
Grocery	•	•	21,362	30.518
Clocery	•	•		
Flour	•	•	86,486	26,029
Wine	•	•	16,441	45,580
Spirits	•	•	21,842	32,389
Drugs, Spices, &c			6,327	5,969
Stationery, Books, &c			7.514	4,180
Furniture	-		6.888	7,271
Other Articles	•	•	87,438	13,863
Older Maccoo	•	•	01,100	14,000
Total .			681,000	506,456

Value of Imports and Exports at the Port of Guayaquil, in each Year, from 1852 to 1858.

Years.	Imports.	Exporta.
•	£	£
1852	303,180	304,385
1858	860,988	847,180
1854	817,094	359,882
1855	328,265	358,392
1856	895,739	389,484
1857	681,000	741,162
1858	506,456	474,324

EGGS.—The import of foreign eggs for consumption in the United Kingdom is enormous, and yearly increasing. In a long statistical paper "On the Trade and Commerce in Eggs and Poultry," which I published in the Quarterly Journal of Agriculture of Edinburgh for October, 1856, I furnished some curious and interesting details on the trade and consumption of eggs in various countries, which may be consulted by those who are specially interested in the subject and desire to obtain fuller information. The following Table shows the Quantities of Eggs entered annually for Home Consumption in the United Kingdom, and the Duty Received.

Years.		Years. Imported from all Parts.			Customs Duties.
				Number.	£
1848	-	-	-	88,106,455	39,127
1849	-	-	-	97,884,551	85,695
1850	-	-	-	105,780,589	38,577
1851	-	_	_	115.524,243	42.149
1852	-	_	_	108,320,550	89,507
1853*	_	-	_	128,607,041	28.896
1854	-	-	-	88,279,856	20,000
				From 8th August.	
				Cubic Feet.	
1854	-	-	-	184,816	18,005
1855		-	- 1	500.031	16,668
1856	_	_	-	586,978	19,566
1857	_	_	_	635,056	21,169
1858	_	-	_	672,760	21,105 22,496
1859	•	_	_	743.572	24,787

The duty on Foreign Eggs was reduced, on 8th June 1858, from 101d to 4d per 120, and subsequently altered on 8th August 1854, to 8d per cubic foot of the containing package.

Two hundred eggs are estimated to be packed in one cubic foot, hence the foreign imports in 1859 numbered 148,714,400. France and Belgium are the chief sources of supply, but eggs even reach us now, by steamers, from Spain and more distant quarters. The home production of eggs is large, and the imports from Ireland, of which we have no specific details, must also be considerable, for the poultry kept in Ireland have doubled in number in the last ten years, and are now nearly 12,000,000 head.

EGYPT.—The trade with Egypt has greatly increased of late years. In 1843 the total value of the imports into Alexandria was £1,005,412, of which but £336,590 was from Great Britain. In 1857 the total imports were £2,850,942, of which £1,301,181 came from Great Britain. The total exports in like manner have increased from £1,321,268 to £4,592,531, the proportions

shipped to Great Britain standing respectively at £310,614 and £2,500,000, while in the two previous years, 1855 and 56, they were half a million more. Of the imports in 1857, £892,245 was British cotton manufactures. The number of vessels that entered at Alexandria in 1856 was 2344.

The following tables show the rapid progress of this country within late years.

ENTRIES OF VESSELS AT THE PORT OF ALEXANDRIA.

Years.	Steamers.	Sailing Vessels.	Passengera.	
1854 -	212	2143	16,460	
1855 -	247	2357	26,680	
1856 -	806	2344	33,429	
1857 -	849	2153	36,683	
1858 -	85 8	2043	45,487	

The value of the goods which pass through Egypt to and from India, already amount to between three and four millions sterling, and is yearly increasing, besides large amounts of specie.

PORT OF SUEZ.

Years.	Salling Vessels.	Passengers from Europe.	Natives.	Negro Population.	Military.
1855	291	2692	1361	351	1103
1856	802	2588	1508	76	- 8
1857	874	3905	1552	850	2770
1858	872	5899	1796	136	96

EMIGRATION.—In the fifteen years ending with 1858, 3,419,048 emigrants left the United Kingdom for various destinations, exclusive of many others who left in passenger ships, which did not come under the supervision of the Emigration Commissioners. Of these the largest number went to America, 2,294,792 proceeding to the United States, and 532,049 to the British North American Colonies, principally Canada, but many of the latter only passed through the Province to the Western States. It is a remarkable fact as showing the improvement in the condition of those who emigrated, that the Irish emigrants sent home between the years 1855 and 1858 upwards of two millions sterling to bring out their friends and relatives to join them. 533,974 proceeded to the Australian Colonies. The largest emigration was in the years 1851-54, when it averaged 340,000 per annum, but of late years it has been declining.

averaged 340,000 per annum, but of late years it has been declining.

To encourage immigration, and at the same time to prevent the land being bought up by large speculators, the Canadian Government has offered free grants of land to settlers in special localities under certain conditions, of which the following is a summary:—The grants are of 100 acres each. Applicants for these must be full eighteen years old. Within one month after the land has been allotted to him, the applicant must take possession of it; he must put in a state of cultivation at least twelve acres in four years; he must build a house (twenty feet by eighteen), and reside on the lot until the conditions of the settlement are duly performed. Families of several settlers entitled to lands, if they wish to reside on a single lot, will be free to do so; but they must make the clearings required on each lot. The Government has opened a road through the district, and the settlers must keep that road in repair.

All lands intended for sale in the Australian Colonies, exclusive of New

Zealand, are disposed of by public auction, or at least they must in the first instance pass that ordeal; and they are not sold for less than 20s per acre, excepting in the case of Tasmania, where, by a recent Act, the pastoral lands may be sold for 10s per acre. With such exceptions, these are Imperial regulations of the past regime; but some of the local governments who have now power to legislate on the subject, are contemplating important changes, and have with that view repeatedly, but as yet unsuccessfully, brought forward new projects, with the chief object of giving increased facilities for the settlement of a resident population. In New Zealand the land is disposed of upon terms which are different in each province, varying from 5s to 40s per acre.

There are Government emigration officers in London, Liverpool, Glasgow, and all the other principal outports. These officers act under the immediate directions of Her Majesty's Emigration Commissioners, and the following is a

summary of their duties:-

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They procure and give, gratuitously, information as to the sailing of ships and means of accommodation for emigrants; and whenever applied to for that purpose, they see that all agreements between shipowners, agents, or masters, and intending emigrants are duly performed. They also see that the provisions of the Passengers' Act are strictly complied with, viz.: that passenger-ships are sea-worthy, that they have on board a sufficient supply of provisions, water, medicines, &c., and that they sail with proper punctuality.

They attend personally at their offices on every week day, and afford gratui-tously all the assistance in their power to protect intending emigrants against fraud and imposition, and to obtain redress where oppression or injury has been

practised on them.

Free and assisted passages to the Colonies are granted for New South Wales, by Her Majesty's Emigration Commissioners, 8, Park-street, Westminster; for South Australia, by the South Australian Government Emigration Agent, 8, Great Queen-street, Westminster; for Otago, New Zealand, by the Otago Emigration Office, 20, St. Andrew-square, Edinburgh; for Canterbury, New Zealand, by the Canterbury Emigration Office, 32, Charing Cross; and for the Cape, by the Hon. W. Field, Emigration Commissioner, Bridge-street, West-

All these gentlemen will, if requested, supply forms of application. Eligible for such passages are—1. Persons in the habit of working for wages as agricultural labourers, shepherds, herdsmen, and copper miners. 2. Single female servants, under the age of 35. 3. Married country mechanics, such as masons, bricklayers, blacksmiths, farriers, wheelwrights, sawyers, carpenters, and gardeners. 4. The same class of mechanics when single, if they accompany their parents, or are either with a sister or sisters not less than 12 years old.

For the Cape, passages are also granted to cabinet-makers and upholsterers, painters, plumbers and glaziers, plasterers, blockmakers, whitesmiths, tinplateworkers, wheelwrights, shipwrights, boatmakers and sailmakers, coopers, coach-builders, saddlers and harnessmakers, shoemakers, tailors, bookbinders, compo-

sitors and printers, butchers and bakers.

The ages of married couples must not, in the case of either the husband or wife, exceed 45 years. Husbands cannot be accepted without their wives, nor wives without their husbands. Single women under 18, without their parents, are not admissible, unless under the care of some near married relations. Families with two children under 7 and three children under 10 years of age are ineligible for free passages to New South Wales, but they may obtain passages for South Australia, Otago, Canterbury and the Cape. Widowers, and widows with young children, persons who have been in the habitual receipt of parish relief, or who have not been vaccinated, or not had the small-pox, cannot be accepted.

In every emigrant ship dispatched to the Cape, a free cabin passage is given to a certificated teacher, together with his family, on condition of instructing the

emigrants during the voyage. Assisted emigration to Natal is confined to the nominees of the Colonists.

Mr. Richard W. Butler, of Hobart Town, forwards to Tasmania "respectable single females, accustomed to domestic occupations." Candidates for a free passage must be between the ages of 16 and 35, and must have been accustomed to the duties of cooks, housemaids, nurserymaids, nursery governesses, &c. The agency is conducted by Mr. Thomas B. Parker, at the Tasmanian Emigration Office, 29, Bucklersbury, London.

A portion of the passage money must be contributed by the emigrants. For South Australia these part payments are:

For New South Wales the part payments are:—52 per head for children under 12; £4 per head for all persons between 12 and 40; £8 for all persons between 40 and 50. For single mem over 49, for single women over 35, and for the wives or husbands of persons resident in the colony, the full payment of £12 each is to be paid. The part payments for emigrants to the Cape are £1 from every male, and 10s from every female adult.

Emigrants to whom free passages have been granted must find their own out-fits, without which they are not allowed to embark. The smallest quantity of clothing which will be passed is—For men and lads—6 shirts, 6 pairs of stockings, 2 flannel shirts, 2 pairs of shoes or boots, 2 complete suits of strong outer clothing, and 2 lbs. of marine soap. For women and girls—6 shifts, 2 flannel petticoats, 6 pairs of stockings, 2 pairs of strong boots or shoes, 2 strong gowns (one of warm material), 4 towels, 3 sheets for each berth, and 2 lbs. of marines soap. Two or three coloured shirts for men, and an extra supply of flaunel for women and children, are very desirable.

Emigrants sent out by the Commissioner for the Cape are provided with cooking utensils, bedding, canvass bags to contain linen, knives and forks, spoons, metal plates and drinking mugs, which articles will be the property of the emigrants, provided they behave well on the voyage. Bedding and cooking and mess utensils are also found for free emigrants to New South Wales and South Australia. The Otago agent provides cooking utensils, but the emigrants must find bedding (viz. for each bed, 1 mattress, 1 bolster, 2 blankets, 1 coverlet), and mess utensils (viz. for each person 1 knife and fork, 1 deep tin or pewter plate, 1 spoon, 1 drinking-mug, 1 hook-pot). The same articles are to be found by emigrants who have obtained assisted passages to Canterbury.

The baggage of each emigrant must not weigh more than half a ton. It must be closely packed in one or more boxes, not more than 2 feet 8 inches long, 1 foot 6 inches wide, and 1 foot 6 inches deep. The owner's name should be painted on the boxes. Mattresses and feather beds, firearms, wine, spirits, beer, gunpowder, percussion caps, and lucifer matches cannot be taken by emigrants.

EXCISE DUTTES.—A return, issued from the office of the Accountant General, of the excise duties received during the years 1857 and 1858, shows that the gross sums raised were very nearly the same in both of those years—rather more than 18½ millions. The articles from which the greatest excise duties were raised were, spirits, £9,299,000 being due to this source of revenue; £5,568,000 by the duty on malt; £1,229,000 by that on paper of all kinds. The hop duties in 1858 produced a sum of £417,526, and 348,669 were paid by the railway companies as the duty on the sums received for the conveyance of passengers. Of the whole 18½ millions, £12,500,000 are raised in England, £3,500,000 in Scotland, and £2,500,000 in Ireland.

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EXPORTS—From 1840 to 1853 the aggregate amount of British exports exceeded the national debt by nearly £100,000,000; the declared value of British

and Irish exports having been £877,269,124, while during the same period the highest amount of the national debt was only £791,809,838 in 1848.

In 1853 the exports amounted to nearly a hundred millions sterling, the amount having increased in fourteen years about 83 per cent. These exports were distributed to foreign countries and British possessions in the proportion of 66 to 33 per cent. respectively. The bulk of the foreign exports were principally to Europe and North and South America. Of the exports to British possessions, the East Indies took the largest proportion till 1853, when the Australian exceeded the Indian exports.

To show the effect of free trade, in 1832 the total value of exports was £36,450,594; in 1853 the amount was £98,933,781; the most rapid advance having been made since 1848. The effect of the gold discoveries in the United States and Australia has been to stimulate trade. The exports in the four years, from 1850 to 1854, to the United States had been increased to the extent of £14,500,000 by gold. With respect to Australia in 1852 and 1853, the only years influenced by gold, the exports had risen £11,500,000. So that, during four years, the gold discoveries had already stimulated trade to the extent of £26,000,000.

At page 5 of this Supplement I have already given the real value of the exports to 1858. In 1859 the net value of the exports of British produce and manufactures was £130,440,427, showing an increase of 6 per cent. over 1857, and upwards of 11 per cent over 1858. The real value of the foreign and colonial merchandise exported for the past three years was as follows:

	_		,	
1857	-		-	£24,106,194
1858	-	-	-	23,174,028
1859	_	_	_	25,203,162

It would naturally be expected that, to prove the healthy and prosperous condition of the trade of the country, the values of imports and exports respectively, representing (to use a commercial term) the account current between our merchants and their customers abroad, should as nearly as possible balance each other, so that we should neither appear to receive more goods than we can afford to pay for, nor to supply more than are duly accounted for to us in return. We find, however, to take the past year as an example, that after deducting the value of the foreign articles imported and not consumed in this country (with respect to which, therefore, no liability can be incurred by us abroad, or, if incurred, is discharged by their re-exportation), from the total value of the imports, the remaining amount exceeds the value of the British produce exported by upwards of 234 millions.

£179, 884 ,981	- 41					Thus, Real value
25,208,168	norse	merch	E COIONIE	ioreign ar	- ANTOR - OF 101	Deduct Real v exported
154,181,818 130,440,427	· •	ountry	in this	e consume	aports to be	Real value of imp Real value of exp
28,691,391			fference	•	• • • • • • • • • • • • • • • • • • • •	

The explanation of this discrepancy is however at once found in the fact that the value of the exports, as declared by the merchant here on shipment, necessarily excludes the charges for freight, insurance, shipping, and landing, incident to the conveyance of the goods to a foreign port, and their delivery there, and also the profit attendant on their transport from one country to another, while the value assigned to the imports, on the other hand, being computed from the prices which the goods bear in this market, must include both the charges just enumerated and the profit realized by the importer: This consideration we deem quite sufficient to account for a difference not amounting to 13 per cent

From a return issued by the Board of Trade, of the declared value of British and Irish produce and manufactures exported from the United Kingdom during 1859, the following list has been compiled, showing the order in which the various communities of the world rank as our customers. Its chief feature is the extraordinary growth of our Eastern trade. In 1857, the value of our exports to Australia was exactly equal to those to India, namely, £11,600,000. In the subsequent two years the Indian total has increased 75 per cent., while our commerce with Australia, although better in 1859 than 1858, shows a decline. Within the same period, also, our dealings with China have doubled. Contrasted with the figures of 1858 the trade with our possessions during the past year (which still constitutes more than 35 per cent. of the entire export operations of the United Kingdom), presents an increase in all instances save those of the West Indies, Singapore, the Channel Islands, Mauritius, the Ionian Islands, and British Honduras. The shipments to the United States, which experienced a serious check after the panic of 1857, have recovered to a point beyond their former scale, and are now more than 17 per cent. of our total exports alone. Germany, although her trade with us has declined for the past three years, takes about half as much as the United States, and then follow South America and Holland. France presents a falling off sufficient to indicate a most unhealthy state of the commercial relations of the two countries. In 1857 Turkey stood before Russia; but last year their positions were transposed. Spain, Portugal, Naples, and the Papal States all figure on the unfavourable side. Sardinia, however, shows a good increase. Sweden and Norway have also carried on a large trade, while that with Belgium has been unsatisfactory. Finally, it is to be remarked that our trade with European States is every year becoming of a more secondary character as compared with that which we have established among our colonial and American progeny. It is to those quarters that the magnificent augmentation exhibited in the present total over 1858, and which renders it of unprecedented amount, is entirely due. The general increase is £13,831,671, while to the colonies and the United States it was £14,022,424. The balance of our business carried on with all other parts of the world resulted, therefore, in a falling off.

EXPORTS OF BRITISH PRODUCE AND MANUFACTURES.

		1858.		1859.	
1. British possessions:-		£.		£.	
India -	-	16,782,386	***	19,832,699	
Australia –	-	10,463,032	•••	11,225,616	
British North America	-	8,159,845	***	8,615,087	
Hongkong -	•	1,145,669		1,931,595	
Cape of Good Hope	-	1,602,612		1,762,168	
British West Indies	-	1,792,828		1,606,700	
Singapore -	-	960,385		1,430,824	
Gibraltar -	-	852,728		714,267	
Ceylon -		541,181	•••	667,680	
Malta -	_	438,066		624, 107	
Channel Islands	-	508,264		612,953	
Mauritius -	-	603,103		567,204	
British Guiana	-	459,743	***	555,346	
West Coast of Africa (Brit.	.)	263,725		279,058	
Ionian Islands	-	837,905		251,082	
Natal -	-	100,785		174,986	
British Honduras	•	136,710		115,644	
Heligoland -	_	282		60,238	
St. Helena -		84.957	***	43,890	
Aden -	_	86,899	***	42,705	
Falkland Islands	-	33	-	11,183	
Ascension -	_	6,917		9,637	
Kooria Mooria	_			977	
	-		40,222,457		46,125,046

EXP	1	L19		HXI	, .
		1858.		1859.	
2. United States:-		£.		£,	
Atlantic ports	•	18,994,815	•••	22,174,245	
California -		496,638	***	437,088	·
	•		4,491,448		22,611,283
3. Germany:— Hanse Towns	_	9,021,877	•	9,180,104	
Prussia -	-	1,956,199	•••	1,492,541	
Hanover -	•	1,640,189		967,049	
Mecklenburg -	•	59,831	•••	64,370	
Oldenburg -	•	61,584	12,749,110	58,095	11,777,163
4. South America:					,,
Brazil -	-	3,984,817	•	8,686,358	
Срін -	-	1,117,580	•••	1,474,563	
Buenos Ayres - Peru -	-	1,008,819 1,163,155	••• -	968,177 857,008	
New Granada -	-	505,749	•••	729,468	
Veragua -	-	522,670 316,738	•••	692,688 817,706	
Venezuela - Ecuador -	•	816,738	•••	817,706	
Ecuador -	•	26,963	8,646,491	22,251	8,788,914
5. Holiand -	•		5,478,312	•••	5,879,794
6. France	-		4,863,312	•••	4,744,108
7. Russia:— Northern ports		2,724,609		8,493,016	
Southern ports	-	867,890	•••	546.188	
Southern ports Territory in N. E. Asia	-	<u> </u>	•••	546,188 18,762	
Settlement on N.W. Coast	•		•••	602	
of America -	-		8.092.499		4,053,563
8. Turkey	-	-	4 988 619	•••	8,752,458
9. Foreign West Indies, Hayt	i, dec.	-	2,587,063 1,730,778	•••	2,556,971
10. China (exclusive of Hongi 11. Egypt	rong)	-	1 QRA 29Q	***	2,526,0 36 2,195,88 3
Spain and the Canary Islan	nds _	-	2.179.120	•••	2,081,627
18. Belgium 14. Sardinia	-	-	1,810,207	•••	1,474,878
14. Sardinia 15. Portugal and the Azores	-	-	1,174,580 1,548,207	***	1,406,884 1,896,020
16. Two Sicilies	•]	-	1,569,166	***	1,161,788
17. Java	-	. •	832,045	***	1,073,088
18. Tuscany 19. Austria	-	-	983,921 1,228,199	***	801,779
20. Denmark (including Icela	nď) -		595,809	***	789,88 6 724,00 2
21. West Coast of Africa, forei	gn -	-	691,405	•••	710,239
22. Philippine Islands -	-	-	541,475	•••	684,788
23. Syria 24. Mexico	-	-	760,497 411,831	***	677,387 597,951
25. Sweden	-	-	428,144	•••	546,632
26. Norway	-	-	295,288	•••	497,644
27. Greece - • 28. Papal States -	-	=	249,462 409,543	•••	262,309 259,987
29. Central America -	-		393,179	•••	226,662
30. African ports in the Red S	68 -	-	4,525	•••	*204,924
31. South Sea Islands 32. Wallachia and Moldavia	-	•	67,233	. ***	114,949
82. Wallachia and Moldavia 83. Morocco	-	:	175,986 84,076	. ***	111,027 96,390
34. Cape Verd Islands -	:	. •	14,725	•••	22,159
85. Algeria -	-	-	21,033	***	22,169
36. Persia	-	-	8,998 4,520		18,915 5,597
38. Eastern Coast of Africa	-	Ξ	1,927	. *** .	4,391
39. Japan		-		•••	2,892
40. Camboja, Cochin China, & 7	ronquin	•	468	***	505 372
42. Greenland and Davis's Str	uits -	:	_ ***	•••	45
43. French Possessions in Indi		•	831	•••	
		£1	16,608,765	£	30,440,427

^{• £200,000} for telegraph wires.

DECLARED VALUE OF EXPORTATIONS.

			- 1858.	1000.
Apparel and slops	-	-	£1,948,858 -	£2,191,432
Beer and ale	-	-	1,851,755	2,116,207
Books -		-	890,584	478,287
Butter -	-		541,058	717,895
Candles -	-	-	157,618	187,830
Choese .	-	-	90,718	137,564
Coal and enim	-	-	8,045,434	8,266,174
Cordage -	-	•	166,625	190,900
Cottons -	-	-	88,421,843	38 ,742,740
Cotton yarn	-	-	9,579,479	9,465,704
Earthenware -	-	-	1,153,579	1,813,364
Fish -	-	-	576,787	458,739
Furniture -	-	-	258,022	241,902
Glass -	-	-	569,205	607,578
Haberdashery	-	-	8,462,832	4,288,780
Hardwares -	-	-	8,277,607	8,826,030
Leather -	-	-	2,012,916	1,997,708
Linens -	-	-	4,124,856	4,607,945
Linen yarn -	-	-	1,746,340	1,684,489
Machinery -	-	-	8,599,352	8,701,094
Iron and steel	-	-	11,197,072	12,327,093
Copper and brass	-	-	2,855,051	2,600,307
Lead -	-	━.	616,215	668,037
Tin -	-	-	- 1,621,849	1,884,380
Oil seed	-	-	844,978	930,875
Painters' colours	-	-	880,559	460,374
Pickles and sauces	•	-	289,910	341,824
Plate and jewellery	-	-	455,006	495,162
Salt -	-	-	286,222	253,575
<u>Silks</u> -	-	_ -	2,096,200	2,851,839
Soap -	-	. •	209,503	225,918
Soda -	-	- -	818,797	1,024,983
Spirite -	-	-	206,429	805,900
Stationery -	-	-	803,738	840,172
Sugar, refined	-	•	862,472	848,958
Wool -	-	-	902,341	689,967
Woollens -	-	-	9,776,944	12,032,831
Woollen yarn	•	-	2,966,748	3,080,306
Unenumerated article	, .	. •	7,951,284	9,412,462
			116,608,758	130,440,427

Subjoined are the quantities of provisions, &c., imperted and taken for home consumption;—

•	Im	ported	- Taken fo - Consu	r Home mption.
	1858.	1859.	1858.	1859.
Grain, wheat, grs	4,941,719	4.000.922	4,275,435	4,023,578
Grain of other descriptions, gra.	4,087,679	8,905,942	4,135,889	8,954,814
Indian Corn, ors	1,750,825		1,762,890	1,821,633
Flour and meal, cwt. Provisions:—	8,860,764	8,830,770	8,894,972	8,857,250
Bacon, pork, lard, &c., cwt	576,289	583,710	Free	Free
Butter and cheese, cwt	751,658	832,210	740,000	818,759
Animals, No.	285,048	847.841	Free	Free
Eggs, No		148,631,000	184,552,000	148,714,400
Cocoa, lbs	10,338,404	6,006,759	8,071,115	8,480,987
Coffee, lbs	60,697,265	65,353,099	85,338,111	34,492,947
Sugar, cwt	9,010,796	9,098,880	8,746,729	8,905,744
Tea, lbs	75, 132, 535	75,077,452	78,217,484	76,362,008
Rice, cwt	3,692,023	1,450,090	1,761,865	1,306,672
Spirits, gallons	8,506,055		4,561,735	4,911,676
Wines, gallons	5,791,636	8,196,026	6,697,224	7,262,965
Tobacco, lbs		50,671,964	84,110,751	34,791,262
Currents and raisins, cwt.	939,865	986,919	648.338	785,970
Lemons and oranges, bushels -	972,653	1,103,296	983,777	4,077,820
Spices, lbs.	16,082,218	11,614,903	4,760,677	5,015,787
Direction of the contract of t	70.054	11,014,209	m,/00,07/	0,010,181
Ditto, cwts	72,254	83,688	20,689	21,049

Taken for Home

The following were the comparative imports and exports of raw materials:-

			Imported,		Exp	orted
			1858.	1859.	1859.	1859.
Flax, cwt.	-	•	1,283,905	1,432,087	••	••
Hemp, cwt.	•	-	882,110	1,088,249	••	••
Raw silk, lbs.	-	-	6,227,576	9,920,891	2,314,519	2,152,327
Cotton, cwt.	-	-	9,235,198	10,946,831	1,585,800	1,568,778
Wool, lbs.	-	-	126,738,723	133,374,634	\$6,702,548	29,106,750
Tallow, cwt.	•	•	1,235,789	1,074,836	22,397	6,791

Of silk manufactures the total stands thus:-

•	Imp	orted,	Consur	or mome nption
Silk manufactures of Europe, Ibs. Ditto, of India, places	1858. 827,652 207,081	1859. 987,080 843,034	1858. 812,895 8 3 ,01 2	1859. 964,872 47,747

FACTORIES.—The provisions mentioned, p. 297, were amended by 16 and 17 Vict. c. 104, enacting, that from Sept. 1853 no child shall be employed in any factory before six o'clock in the morning, or after six o'clock in the evening of any day, and no child shall be employed for any purpose on any Saturday after two o'clock in the afternoon. But children on any day but Saturday, from September 80 to April 1, may for one month be employed between seven in the morning and seven in the evening; notice being given to the inspector of such employment, and hung up in the factory. Children not to be employed in re-

covering lost time after seven in the evening.

The cotton factories of the United Kingdom number now about 2250. They are chiefly located in England, in Lancashire, Cheshire, Yorkshire, Nottingham, and Derby, with some few in other counties. In Scotland, in Lanark and Renfrew, while the few carried on in Ireland are more widely scattered. About 400,000 persons are directly employed in the cotton factories. In 1856 the grand total number of factories in the United Kingdom amounted to 5117—viz. 4432 in England and Wales, 530 in Scotland, and 155 in Ireland. The total number of spindles was 33,503,580, and of power-looms 369,205. The amount of moving power is 137,711 by steam and 23,724 by water. The total number employed included 273,137 males, and 409,860 females, making together 682,497. There were in the whole of the United Kingdom 460 silk factories, 417 flax factories, 525 worsted factories, 1505 woollen factories, and 2210 cotton factories. The cotton factories employ 879,218 hands, the woollen 79,091 hands, the worsted 87,724 hands, the flax 80,262 hands, and the silk factories 56,137 hands.

Of children under 13 years of age, attending school, there were employed 24,687 boys, and 21,534 girls; and 70,247 males between 13 and 18 years of age

were employed.

FIGS.—The imports of this dried fruit are considerable, chiefly from Smyrna. The imports entered for consumption in 1858 were 38,046 cwts., of which 24,877 were from Turkey, and 10,500 cwts. from Spain and Portugal.

The duty established on the 15th May, 1840, was 15s 9d per cwt.; in March,

1860, this was reduced to 7s.

The following particulars as to Smyrna figs are interesting, Along the Meander, eighteen miles from Naslii Bazaar is the village of Ortoxi, beyond which to the eastward, the fig of commerce is not produced. The whole valley of Aidin from this place to the sea produces figs of the finest quality. The fig of commerce is called "lop," and is divided into two sorts:

1. Eléme, or picked by hand.

1. Eléme, or pickeu by manu.
2. Bazeinrghan injiry, or merchant's figs.

There is another smaller sort called "h'ourda," sent to Scala Nuova for the Greek islands. The fig for fresh eating is called "shekerinjiry," or sugar fig, and will not preserve for exportation. Naslii contains 3500 people, with a large village population in the neighbourhood. The fig and fruit orchards are even more carefully cultivated than at Aidin. The average produce of figs is about 130,000 kintals of 125 lbs. English each. The average annual import of figs from Turkey in the last five years has been 30,000 cwt.

FISHERIES. The annual returns of the Fishery Commissioners of Ireland and Scotland enable us to form an estimate of the extent and progress of the coast fisheries in those parts of the kingdom, but we have now no details for England and Wales. The collection of returns for England was discontinued after the 5th January, 1850, at the same time that the branding and punching of cod and ling ceased.

The take of fish necessarily varies considerably, and I need not cumber these pages with an annual return for a long series of years. The number of cod, ling and hake taken in Scotland in 1858 was upwards of 3,000,000, of which 95,596 cwts. were cured dry, and 4584 barrels in pickle, and upwards of 70,000 cwts. were consumed fresh; 32,152 cwts. were exported, of which 13,831 cwts. went to Ireland, 14,603 cwts. to the Continent, and 3717 cwts. to places out of Europe. In 1859 the take of cod was close upon 4,000,000 fish; 118,883 cwts. were cured dry, and 5363 barrels in pickle; and 35,923 cwts. were exported. The average quantity of cod cured in Scotland may be taken at 100,000 cwts., in one or two years it has reached 110,000 or 112,000 cwts.

The quantity of herrings taken and cured is more variable. In 1858, 636,124 barrels were cured, and upwards of 80,000 barrels consumed fresh. Of those cured, 233,374 barrels were officially branded; 350,204 barrels were exported, of which 269,819 went to the Continent, chiefly to Stettin, Dantzic, Hamburg, and Botterdam; 79,054 barrels went to Ireland, and 1331 barrels to places out of Europe. In 1859 only 491,487 barrels of herrings were cured and 158,676

barrels branded. Number of barrels of herrings exported:-

1890	•	•	253,516	•	1850	•	-	340,256
1830	•	•	181,654		1855	•	-	442,964
1840	-	•	252,522	- 1	1859	-		272,980

The number of boats, decked or undecked employed in the shore curing, hering and cod and ling fisheries on the coasts of Scotland and the Isle of Man in 1858, was 12,516, in which were 43,072 fishermen and boys. There were also employed 1152 fish curers, and 1961 coopers. The estimated value of the boats was £274,990; of the nets, £384,014; and of the lines, £66,552; making a total of £725,556. Of the tonnage engaged 107,907 tons were British, and 16,512 foreign. The total tonnage employed was 214,286 tons, and 105,367 persons in all were employed in the fisheries.

The following distinguishes the employment, &c. of the boats:--

		TONNAGE.		
	Men.	British.	Foreign.	
Importing stave wood or hoops Importing salt Carrying herrings or coddah coastwise to market Exporting, ditto	1096 1897 1929 8788	5,453 26,424 26,298 35,902	7,757 159 8,596	
Total	9665	94,077	16,512	

There are not wanting signs that Continental States are beginning, though alowly, to perceive the disadvantages belonging to a restrictive system of trade, and are applying to fisheries and their produce that freedom which will gradually encourage importation from other countries, and which Great Britain, and Scotland especially, will be so well able to supply. Not long ago Belgium gave the example, and in the course of 1858, the Fishery Committee of the Dutch Government signified that great modifications have been made in the laws regulating the Dutch Fisheries; that instead of the former total prohibition of foreign herrings, a low duty upon their importation has been substituted, which, it is said, will probably be removed altogether in a few years. Holland had hitherto been remarkable for her jealousy upon the subject of fisheries, and for her perseverance in a rigorous exclusiveness, which results have shown to have been but little to her own benefit. It may be, perhaps, that the rapid and very remarkable rise of the Scotch Fisheries, under the measures adopted in this country for their development, of which the crews both of the Dutch cruisers and fishing busses have personal and direct evidence, have brought about the introduction of a liberal and more amicable policy; certain it is that the astonishing success of these fisheries, and the trade derived from them, have induced the Dutch Government to direct their special attention to the system upon which they are conducted, with a view to assimilate their own in a great degree to it. Government of Denmark, which owns the fisheries upon the coast of Iceland, have likewise modified the former restrictions that subsisted there; and when these principles extend to and reach nations of greater size, wealth, and powers of consumption, the issue cannot fail to tell favourably upon Scottish fishermen and their employers, and to give to the maritime population and industry of this country the best encouragement to adventure and improvement, and to its capi-

tal new outlets for successful and profitable employment.

For a long period the *official brand* affixed by our Government officers, had riven character and importance for quality and cure to the trade in herrings on the Continent, but the Government in 1858, after inquiry, endeavoured to do away with it altogether at the public expense, or else to make it self-supporting. Considerable difference of opinion prevailed among the curers on the subject, some were for retaining the brand, others for abolishing it altogether. However, the Lords of the Treasury having regard to the strongly expressed opinion of those engaged in the trade, and of their customers and agents on the Continent, who attach much importance to the value of the Government brand, agreed to its continuance, subject to a fee of 4d for each barrel branded. And an act

authorising this charge was passed (21 and 22 Vict., cap. 69.)

The foreign merchants announced their resolution, in regard to their future dealings for herrings in this country, in the following circular in Feb. 1859 :-

"The prevailing spitation on the part of some curers in Scotland against the brand, and a fee of 4d per barrel, to be paid in future, has caused some alarm in the Continental market, as only by virtue of this official guarantee the transactions of Scotch herrings have so considerably increased, particularly within the last ten years, and that in proportion as the demand for Norwegian herrings has fallen off, which is simply on account of the withdrawing of the 'Brake' in Norway, which has destroyed all confidence respecting the quality, salting, assortment, and proper size of the barrela.

"We have, therefore, with avancience before we no besteates to declare that have the respections with the same tensor of the same tensor o

Norwegian nerrings has failed of, which is simply on account of the windrawing of the Brake' in Norway, which has destroyed all confidence respecting the quality, salting, assortment, and proper size of the barrela.

"We have, therefore, with experience before us, no hesitation to declare, that buying herrings in Scotland, on our part, without the brawd, would be quite out of the question; that curers would therefore be obliged to consign all their herrings to the Continental markets; that no house would make any advance before the herrings had arrived and been properly examined, and even then to a more limited extent; and that many of us would also entirely withdraw from a trade thus exposed to endless troubles and vexations.

"Of the import of Stettin, one-third is re-exported to Poland, Bohemia, and Austria; of Danic two-thirds, and of Koenigsberg one-half to Russis and Poland, Bohemia, and Austria; of Danic two-thirds, and of Koenigsberg one-half to Russis and Poland, Bohemia, and Austria; of Danic two-thirds, and of Koenigsberg one-half to Russis and Poland, Bohemia, and Austria; of Danic two-thirds, and of Koenigsberg one-half to Russis and Poland, Bohemia, and Austria; of Danic two-thirds, and of Koenigsberg one-half to Russis and Poland, Bohemia, and a reduction of two dollars or 6s per barrel.

"As regards our home consumption, the case is much the same, thousands of barrels, floating as well as in bond, change hands without being examined, particularly if speculation is going on, the crown and full brand fixes the price, irrespective, however, of an allowance we make for the mark of those curers well known in our markets as the best. The proper assorting, packing, and salting is thus taken into account, and herrings thus treated always command ready sales and the highest prices, so that those curers who take proper care in this respect need not be afraid that their care and attention are not duly rewarded.

"Without the brand all speculation and competition would be at an end, as very few would be abl

of the above kind exists with Great Britain, and therefore no other punishment could be in-flicted on the defrauders than the removal of the forged brand in the presence of the police. The lesson they, however, thus received, will, no doubt, prevent their making a second st-tempt, for they afterwards could not sell the herrings anywhere, and the greater part of them have been consigned to a watery grave, whilst the defrauders are themselves branded in the opinion of every honest man.

opinion or every notest main.

"If we have thus already preved the necessity of keeping up the brand for the benedit of
the herring trade in general, but most particularly for the benedit of the curers themselves, we
are at a loss to find what interest they can have in forcing us to take an article we will not

are at a loss to find what interest they can have in forcing us to take an article we will not have, and of which we cannot make use.

"The fee of 4d per barrel, which the British Government intend taking for the brand in future, must in the end come out of our pockets, and not out of theirs, and it is see who would have more cause to complain of it. No ourer is obliged to have his barrels branded; if, therefore, some of them are disposed to send unbranded herrings to the Continental markets, they are at perfect liberty to try the experiment at their own risk; for, as regards ourselves, we positively declare that, with the exception of a limited quantity of the July catch, in order to have early new herrings in the market, during the regular fishing season we will not buy any herrings without the official crown and full brand."

Signed by first two Name.

Signed by forty-two Firms.

The Irish Sea Coast Fishery does not appear to be in that progressive state of general improvement which could be desired. In some localities, where the means of transit by steam are available, an activity in capture and an increase in business are perceptible. There appears, by the returns from the Railway Companies, an addition of sixty tons in the amount conveyed in the year 1858 over that carried in 1857. The Commissioners attribute the languid state of the Sea Fisheries of Ireland, in a great measure, to the want of curing establishments. In districts remote from railway and steam communication there is no constant and steady demand for sea fish, and the sale depends upon the casual requirements of the neighbourhood, the vendors being at the mercy of the purchasers so far as price is concerned. The salmon fisheries of Ireland present a much more flourishing condition; they are progressively improving.

In 1857 the quantity of fish, in gross, conveyed by the Southern and Western

Railway and Midland Great Western, was-

1.350 tons. Of which salmon and turbot constituted 381 Making the gross of coarse fish 969 For the year 1858, the gross quantity was-1,410 tons. Of which salmon and turbot constituted 804 Making of coarse fish 1,106

Mr. Fennell, in reporting to the Commissioners, says-The advantages of steam transit, as applying to the development of the fishing, is telling with good effect on that part of the northern coast connected with Lough Foyle, for a considerable distance around. Steamers call daily at Moville, and receive the fish for Liverpool and Glasgow; the principal fishes are cod and turbot; of the former, all go to Liverpool fresh; to Glasgow, about one-third fresh, and two-thirds "green-salted," that is, not dried, neither in pickle, but simply salted and sent in baskets. A few years ago there was only one buyer at Moville, now there are fifteen; some of whom have prospered well, realized money, and built good houses to let as well as to occupy; the improvement in the condition of the fishermen, and improvement of their boats, is commensurate. The cod fishing commences about the 1st of October and ends about the 1st of July; thus, for nine months in the year trade continues in cod.

The turbot fishing continues from March to November, so that throughout

the whole year profitable employment is afforded.

A considerable quantity of soles and plaice are also shipped from the trawlers. The cod fishing commences in October, in the Lough opposite Moville; they move out, and as the weather settles in spring, the fishermen follow them eight miles out, and finally twenty miles out to "Hamden Bank." From the 1st of October to the 1st of May, about 150 boxes of cod are weekly shipped to LiverFIS 125 FLA

pool; and from May to July, about 90 boxes per week; total to Liverpool, during the season, 5220 boxes; to Glasgow, double that quantity; total, 15,860 boxes; each box contains fourteen fish.

The fishermen generally contract with the buyers at 7s per dozen of fourteen fish, all the year round; thus, the amount received by the fishermen is £5481 annually for cod fish; the buyers pay 3s freight, and 6d per box for fishing. Turbot average to the fishermen about 2s per dozen; there are about twelve dozen of turbot shipped weekly for forty weeks; total, 5760, at 3s, £814. Soles, &c., about £500 annually; total received annually by fishermen, £6795.

FLAX.—The declared value of the exports of British linen manufactures and linen yarn, in the year 1840, amounted to £4,128,000; since then it has been as follows:—

		£.	ı			e
1841		4.820.021	1850	:	:	4,828,994
1842		3,872,300	1851			5,058,822
1848	•	8,702,052	1852	•		5,372,351
1844	•	4,075,028	1858	•		6,918,409
1845	•	4,096,936	1854	•	•	5,052,959
1846		8,706,218	1855		•	5,050,998
1847		8,608,744	1856	•		6,253,760
1848		8,296,288	1857			6,164,833
1849		3,925,894	1858			5.870.698

In 1859 the total value was £6,291,784.

Flax is largely cultivated in the United Kingdom, especially Ireland; but besides the amount produced at home, it is imported to a considerable extent from abroad.

According to an official return of the imports of flax into the United Kingdom from 1801 to 1853, it appears that in fifty-three years we imported 2,252,422 tons of flax, which, at the moderate average price, for the whole term, of £40 per ton, amounted to £90,096,880. Of this immense quantity and value so imported, 1,587,395 tons, worth £63,495,800, came from Russia. And, with the exception of a few hundred tons received from our Australian possessions (only 292 tons in the last ten years) the remaining quantity of 665,027 tons imported was of the growth of other foreign countries. Of hemp we imported 1,829,291 tons, of which 1,505,189 tons, at an average price for the whole term of £35 per ton, and worth £52,681,615, came from Russia. As regards the residue of the importation, 324,102 tons, the circumstances are different from the case of flax; fully three-fourths of that quantity, consisting chiefly of the less valuable fibres, sunn and jute, having been supplied from our East Indian possessions. We therefore took from Russia in those fifty-three years—of flax, 1,587,395 tons, worth £63,495,800; and of hemp, 1,505,189 tons, worth £52,681,615; together 3,092,584 tons, worth £116,177,415.

It was stated by a deputation, which waited in January, 1860, upon the President of the Board of Trade, that there were then 651,000 spindles in Ireland, of which, however, 121,000 were idle, owing to the depressed state of trade and the want of an open market, and at least 2,000,000 of the Irish people were more or less dependent upon the linen trade. Ireland at present used more flax than France could produce, and bought two-thirds of the entire flax worked in Irish mills, from foreign countries. £12,000,000 are invested in our linen trade, and between £3,000,000 and £4,000,000 are annually distributed by its means.

The following comparison of the increase in imports of foreign hemp and flax indicates the progress of this branch of industry. The flax dressed and undressed imported into the United Kingdom, in the year

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1830 was 944,096 cwt. 1850 ... 1,622,918 cwt. 1859 ... 1,432,037 ,...
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According to the latest returns, there appears to be now in the United Kingdom 417 flax mills or factories, with about 1,300,000 spindles, and 8,700 power-looms, employing 80,260 persons; of these, 139 factories are in England and

Wales, 168 in Scotland, and 110 in Ireland. Scotland and Ireland employ two-thirds of the hands, and keep 846,000 of the spindles going.

In the close of 1858, there were on the average in Ireland, of idle and partially

In the close of 1858, there were on the average in Ireland, of idle and partially employed spindles, about one-eighth of the whole number,—the whole number being nearly 600,000,—and many of the mills were totally out of work, caused chiefly by the dearth and scarcity of the raw material.

The imports of foreign fibre for the last few years have been far below the requirements of the trade, and the home cultivation has been decreasing instead of extending to meet the demand. In 1858 the price of hand-scutched flax advanced nearly 50 per cent. Capitalists (we are told by the organ of the Irish linen trade) ready to invest largely in the erection of power-loom factories for the weaving of linen, are kept back from engaging in the enterprise because of the state of the markets and the famine rates of flax. The produce of the 100,000 acres now in cultivation with flax in Ireland, is fully absorbed by the wants of local factory owners, and the demand for continental markets.

By the extension of free trade measures in France, the linen manufactures of that country would be able to take 10,000 tons per annum of that quality of flax which cannot be raised on their own lands. The Irish flax spinning trade, we all know, is of vital importance to the general commerce of Ulster. Every incidental circumstance that affects the linen manufacture, gives its peculiar tone in a greater or less degree to all other sections of trade, from that of the highest merchant to the humblest shopkeeper.

But it is not only Ireland that is affected by this deficiency of supply, the evil

presses equally great on English and Scotch spinners.

Although there is necessarily a limit in this country to the extended cultivation of flax, owing to the exhausting nature of the crop, and the stipulations in leases, which, in many cases, prohibit its culture; yet there is no reason why in India, our North American, and other colonies, where there is abundance of cheap land at disposal, its production should not be stimulated and extended.

In India it might be produced in abundance, and there does not appear to be any valid or sufficient reason why, with land so much cheaper, and the cost of labour so trifling, the fibres of India—some of which equal, if they do not surpass, the best of Europe—should not, with a little encouragement, care, and perseverance, become a large and constantly increasing item of import here. The importance of this Flax Supply question may be judged of by a comparison of the progress of home cultivation, import, and manufacture.

In 1850 we imported 91,145 tons of flax, dressed and undressed. In 1858

In 1850 we imported 91,145 tons of flax, dressed and undressed. In 1858 our foreign imports only reached 64,145 tons. The quantity of linen and yarn exported in 1850 was in value £4,845,030, and the quantity kept for home consumption was valued at £9,700,000, together £14,545,030.

In 1859 the value of the linen and yarn exported was £6,219,734, and if we assume the proportion used at home at double that amount, we have a total of about £18,659,000.

Extent of land under culture in Ireland with flax.

Y	ears.		Acres.	Years.	Acres.
1812	•	•	78,000	1826 to 1846 .	not known
1813	•		52,000	1847	58,312
1814			62,000	1848	53,000
1815			91,000	1849	60.814
1816			93,000	1850	91,040
1817			57,000	1851	140,586
1818			83,000	1852	137,008
1819		. 1	77,000	1853	174,579
1820	•	. 1	91,000	1854	151,403
1821		. 1	80,000	1855	97.075
1822		. 1	86,000	1856	106,311
1823	•		95,000	1857	97,721
1824			112,000	1858	91,555
1825		: 1	86,000	1 ' ' '	

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FLORIN.—In order to introduce if possible the decimal divisions in our coinage, a new silver coin under the title of the florin, of the value of 2s, was minted in 1849, and since that period nine or ten million pieces have been put into circulation.

FRANCE.—The population of the empire in 1856 was 36,039,364. The revenue in 1858 was £74,680,000, and the expenditure 74,200,000. The public funded debt on the 1st June, 1858, was £336,883,871, and the unfunded debt

£40,072,780, while the annual interest charged was £16,000,000.

France, like England, has participated largely in the increased commerce arising out of the gold discoveries in Australia and America, and her financial condition has been thereby considerably improved. At no former period has France been so rich in the precious metals, and the coinage has exceeded that of all former periods. The following is a statement of the amount coined under different reigns from the introduction of the decimal system in 1793 to December, 1859:

COINAGE OF FRANCE.

	Gold.	Silver.	Total
First Republic	Francs.	Francs. 106,237,255	Francs. 106,237,255
Napoleon Buonaparte	528,024,440	887,582,321	1,415,606,761
Louis XVIII -	889,838,060	614,668,520	1,004,001,580
Charles X	52,918,920	631,914,637	684,833,557
Louis Philippe Bepublic (Inscription Angel for	215,912,800	1,750,273,238	1,966,186,038
15 sous gold) -	56,921,220		56,921,220
" (Hercules for silver) - " (Head of the Goddess		259,628,845	259,628,845
of Liberty) -	370,361,640	199,470,488	569,833,128
Louis Napoleon	8,468,265,980	180,085,578	8,648,351,558
Totals 💂 🝝	5,081,738,060	4,629,860,882	9,711,599,942
or	£203,269,522	£185, 194, 435	£388,463,997

From the foregoing statement we find that more gold has been coined in the

present reign than in all the previous reigns.

The commercial progress of France in the last ten years has been very considerable. Divided into quinquennial periods, from 1838 to 1847 inclusive, the official values of the imports and exports were as follows, expressed in millions of francs:

			Millions.	Milions.	Millions.
1st Period, 1838 to 1842	-	-	5,199	4.976	10,175
2nd Period, 1843 ,, 1847	-	-	6,220	5,777	11,997
3rd Period, 1848 , 1852	-	-	5,774	7,418	18,192
4th Period, 1853 ., 1857	-	-	10.922	11.075	21,997

The total actual value of the foreign commerce of France, imports and exports, in 1857, was £212,132,000.

OFFICIAL VALUE of the IMPORTS and EXPORTS of FRANCE (exclusive of Specie)

in each year from 1846 to 1857.

			Imports. £.	Exports, £.
1846	-	•	50,250,684	47,213,276
1847	-	-	58,718,001	50,828,276
1848	•	-	84,475,736	46,120,709
1849	-	•	45,690,308	56,909,316
1850	-	-	46,965,549	61,241,972
1851	-	•	46,309,237	65,186,502
1852	-	-	57,526,920	67,258,631
1853	-	-	65,255,733	74,452,008
1854	-	-	68,367,701	71,507,250
1855	•	-	86,388,000	86,688,000
1856	-	-	109,634,000	106,368,000
1857	-	-	107,560,000	104,572,000

The figures for 1855, 1856, and 1857 are the real, not the official values.

The number of sailing vessels which belonged to France on 1st June, 1856, were 14,023, registering 826,663 tons, of which 8778 vessels and 192,875 tons belonged to ports in the Mediterranean. The number of steam ships was 225, measuring 45,493 tons, of which 117 were owned in the Mediterranean ports and 108 in Atlantic ports. Of the entire tomage 12 vessels were above 800 tons, 17 from 700 to 800 tons, 28 from 600 to 700 tons, 63 from 500 to 600 tons, 159 from 400 to 500 tons, 280 from 300 to 400 tons, 661 from 200 to 300, 1444 from 100 to 200, 5542 from 10 to 100 tons, and 6042 under 10 tons. In 1859 the French mercantile marine had increased to 14,900 sailing vessels and 330 steamers, registering about 1,000,000 tons, of these 3810 sailing vessels and 148 steam ships belonged to Mediterranean ports.

The number of vessels that entered at French ports in 1855 were 25,051

The number of vessels that entered at French ports in 1855 were 25,051 vessels (sailing and steam), of 3,554,672 tons, manned by 260,092 men as crews. Of these, 10,295 vessels, of 1,308,196 tons, with 108,104 men, were French, and 14,756 vessels, of 2,246,476 tons, with 151,988 men, were foreigners. Of the French vessels 8450 were from foreign countries, 1452 from French colonies, and 393 from the cod and whale fisheries. 2064 vessels, of 252,104 tons, came in ballast. The number of vessels engaged in the coasting trade which entered French ports in 1855 was 92,073, measuring 3,891,680 tons, with 400,876 men as crews. In 1858 the total entries in French ports numbered 24,063 loaded vessels, measuring 3,811,114 tons, of which more than half, (13,525 ships and 2,234,131

tons,) were foreigners.

The imports and exports have steadily advanced from £50,250,684 imports in 1846 to £78,069,346 in 1856. The exports in the same period from £47,213,276 to £81,074,595. In the five years ending with 1855, specie of the value of £83,735,065 was imported into France, of which was re-exported £57,440,344, showing a clear addition to the coin and bullion of

£26,294,711.

The extent of railways opened in France on the 1st January 1855 was 2796 miles, on which there had been expended for construction, &c. £74,772,997, or an average of £26,743 per mile. About one-third of the amount had been contributed by the State, and the remainder by private companies. The total number of passengers conveyed in 1864 was 28,070,458; of merchandise, 8,364,501 tons. The total receipts were £8,077,846; the average gross receipts per mile was £3096, and the expenditure £1336, making the net receipts £1761. The share capital of the railways on the 1st January, 1855, was £35,295,200, loans on bonds £28,023,547, loans on advances from Government £7,337,134, advances from other sources £1,906,241; making a total of £71,862,142. The total cost incurred, and estimated as required, for 6896 miles conceded, was £156,286,122. The third-class passengers constitute about one-half of the travellers by rail. The number of beet root sugar factories in France in 1856 was 275 in work, and 110 out of work. The sugar manufactured was 1,811,025 cwts. The principal factories are situated in the departments of Nord, Aisne and Pas-de-Calais. The annual average price of wheat per imperial quarter in France was in 1851, 34s 8d; 1852, 41s 4d; 1853, 53s 9d; 1854, 67s 2d; 1855, 68s 4d; 1856, 71s 7d. The total population of the four French colonies of Martinique, Guadaloupe, Guiana, and Reunion or Bourbon, was, in 1858, 442,787, and of these about 240,114 were alaves. Algeria has already been noticed in this Supplement.

The importations of 1857 into France were £2,076,000 less than in 1856, and £2,077,200 more than those of 1855. The total real value of imports in 1857 was £107,560,000 against £109,634,000 in 1856, and against 86,388,000 in 1855; and the total real value of exports was £104,572,000 in 1857, against £106,368,000

in 1856, and against £86,688,000 in 1855.

The total number of vessels entered steadily increased from 22,987 in 1855, to 25,673 in 1856, and to 25,736 in 1857, showing a slight augmentation over the preceding one in spite of the crisis, but for which it may be fairly inferred that the augmentation would have been much greater. The chief increase, however, appears to be owing to French vessels, which numbered 10,971 in 1857, against

10,812 in 1856, and against 9587 in 1855; for the foreign shipping entered, which rose from 13,400 in 1855 to 15,361 in 1856, fell to 14,755 in 1857. total tonnage entered was 4,121,777 in 1857 (of which 1,636,917 were French, and 2,484,860 were foreign), 4,068,781 in 1856 (of which 1,248,086 were French, and 2,054,482 were foreign). The decrease in foreign tonnage was more than compensated for by the increase of French tonnage, which it is difficult to reconcile with the complaints embodied in a petition to the Emperor some time back, that ships were lying idle in the ports without chance of being chartered, and that the crews were discharged. These complaints appear to have still less foundation on examining the return of vessels cleared outwards. from 13,770 (5768 French, and 8002 foreign) in 1855, to 14,333 (5,950 French, and 8383 foreign) in 1856, and to 15,977 (7010 French, and 8967 foreign) in 1857. The tonnage also increased from 2,090,698 in 1855 (933,948 French, and 1,096,750 foreign) to 2,307,490 (1,025,136 French, and 1,255,855 foreign) in 1856, and to 2,590,166 (1,213,822 French, and 1,376,344 foreign) in 1857. a comparison be made between the import and export trades, it will be seen that the number of vessels and their tonnage entered are nearly double those cleared outwards, while the real value of goods showed £1,988,000 of imports over exports last year; £3,268,000 on the same side in 1856, but in 1855 an excess of £3,300,000 of exports over imports.

If the various articles of trade be examined, we shall find some interesting facts in relation to the domestic economy of the country. For instance, the importation of horned cattle has regularly decreased, and that of sheep as regularly increased; and while the total of all kinds has been augmented to 678,526 in 1857 from 608,635 the year before—which showed a falling off 625,396, in 1855—the cost has constantly and regularly diminished. Thus the real value of cattle imported in 1855 was £2,316,000; in 1856, £2,240,000; and in 1857, £2,116,000. So that France obtained in 1857 69,891 head of cattle more than in the preceding year, and at a less cost by £124,000, which fact may be taken as evidence of improvement in the feeding and condition of the population, and is, moreover, one of the benefits of progress towards free trade, since the inhabitants of France are so far provided with better nourishment and at less expense.

A large portion of the raw spirits imported from England is coloured, flavoured, and otherwise "doctored" for exportation as French brandy. How great the increase has been will be seen by the following figures:—The importation in 1855 was 13,645,796 gallons, of the real value of \$\frac{1}{2}\$. 144,000; in 1856, 11,667,348 gallons, real value £2,152,000; and in 1857, 22,183,269 gallons, real value £3,364,000. It would also appear that France is ceasing to produce sufficient corn for her consumption, for in 1855 there were imported 1,235,843 quarters; in 1856, 2,859,212 quarters; and in 1857, 1,852,911 quarters. The flour imported respectively for those years was 27,974 tons, 83,830 tons, and 11,132. The total real value of the corn and flour imported was £4,908,000 in 1855, £12,132,000 in 1856, and £4,648,000 in 1857; so that although the importation of farinaceous food was upwards of 2/5ths more in 1857 than in 1855, the cost was £260,000 less for the larger than for the smaller quantity. The rice imported was 32,382 tons, real value £708,000, in 1855; 67,446 tons, real value £1,380,000, in 1856; and 95,611 tons, real value £1,464,000 in 1857.

From the French colonies there was imported in 1855, 90.747 tons sugar, valued at £2,492,000; in 1856, 93,531 tons, value £3,104,900; and in 1857, 84,961, value £3,480,000; while from foreign States there were imported during the corresponding years, 59,654 tons, value £1,384,000; 32,899 tons, value £1,172,000; and 1,804,000. Coffee rose in 1857 to 27,947 tons, value £1,660,000, from 23,222 tons, value £1,300,000 the year before, which was a falling off as compared with the importations of 1855, set down at 36,740 tons, that were valued at £1,327,000. The French appear to be gradually becoming a teadrinking nation, for although the coffee importation has fluctuated, that of tea has steadily increased from 183 tons in 1855 to 197 tons in 1856, and 233 tons in

The importations of olive oil fell off from 24,456 tons to 19,171 in 1856, and to 18,248 in 1857. Wool fluctuated from 33,535 tons, in 1855, to 48,983 in 1856, then down to 37,719 in 1857. Silks of all sorts also fluctuated. and varied in price; and linen fabrics shared the same fate. The quantities of coal imported have steadily risen from 3,817,161 tons, value £3,572,000, in 1855, to 3,915,519, value £3,400,000, in 1856, and 4,205,721 tons, value £3,212,000 in 1857. The benefit of a liberal commercial policy is here again visible, for France was enabled to procure nearly 400,000 tons more fuel at a cost inferior by £360,000 than she did two years previously. The importations of machinery were 2294 tons, value £140,600 in 1855, against 4183 tons, value £244.000, in 1856, and 5037 tons, value £304,000 in 1857. The importations of metals during these three years were respectively:—Pig iron, 118,209 tons, value £804,000; 127,272 tons, value £916,000; 94,740 tons, value £684,000; bar iron, including rods, 54,610 tons, value £528,000; 68,696 tons, value £700,000; 22,957 tons, value £256,000; copper, 11,791 tons, value £1,508,000; 21,0000; as, value £1,196,000; 11,093 tons, value £1,544,000; lead, 33,942 tons, value £576,000; 23,928 tons, value £604,000; 20,478 tons, value £516,000; and zinc, 25,605 tons, value £636,000; 19,139 tons, value £496,000; 25,499 tons, value, £712,000. The remarkable falling off in the importation of pig and bar iron in 1857 will show that, whatever were the sufferings of the iron trade that did not reconsidered the control of the iron trade the control of the iron trade the control of the iron trade the control of the iron trad ings of the iron trade, they did not proceed from the competition resulting from the excessive importations of foreign irons. The importations of nitrates of soda and potassa were 10,452 tons, value £292,000, in 1856; 8061 tons, value £212.000, in 1856; and 13,172 tons, value £392,000 in 1857. The value of gold imported during the three years respectively were-£15,236,000, £18,600,000, and £22,748,000; and of silver, £4,836,000, £4,695,000 and £3,932,000. The values of the numerous classes of goods that come under the denomination "various" entered were for £20,876,000 in 1855; for £24,488,010 in 1856; and for £25,862,000 in 1857.

The exportation of cattle of all descriptions has increased from 116,709 head in 1855, valued at £548,000, to 124,822 head, value £592,000, in 1856, and to 147,428 head, value £608,000 in 1857. The exportations of wines show a falling of in 1857 as compared with the two previous ones, which may be taken as a natural consequence of the oidium, while those of spirits show a decrease as compared with 1856, but an increase as compared with the year before. The quantities of wines and spirits shipped and sent abroad were 30,259,904 gallons, value £8,368,000, in 1855; 31,303,739 gallons, value £10,728,000, in 1856; and 26,293,958, value £8,568,000, in 1857. The exportation of corn rose from 9908 quarters in 1855 to 67,706 quarters in 1856, and to 85,781 quarters in 1857. The exportations of flour during the same periods were respectively 10,078 tons, 8876 tons, and 14,803 tons—the real values of the grain and flour being £248,000 in 1855, £304,000 in 1856, and £408,000 in 1857. The exportations of cotton thread were 235 tons, value £28,000, in 1855; 259 tons, value £32,000, in 1856; and 483 tons, value £72,000, in 1857. During the same periods the exportations of linen thread were 138 tons, value £24,000; 205 tons, value £36,000; and 208 tons, value £44,000; while the corresponding exportations of hemp and flax were 300 tons, value £12,000; 1147 tons, value £52,000; and 2134 tons, value £48,000. The exportations of madder fell off in quantity but increased in value, from 16,300 tons, value £584,000, in 1455, to 16,069 tons, value £684,000, in 1856, and to 12,023 tons, value £616,000, in 1857. Of books, engravings, and music, there were exported during the three years 1712 tons, value £676,000; 2046 tons, value £800,000; and 2156 tons, value £756.000. Of machinery, 3425 tons, value £156,000; 3412 tons, value £176,000; 3716 tons, value £196,000.

Of furnitures, quantities to the value of £210,000, £296,000, and £332,000. Of dress, £252,000, £352,000, and £312,000. The quantities of metal work of all sorts exported were 10,504 tons, value £1,948,000, in 1855, against £11,877 tons, value £1,636,000, in 1856; and 12,911 tons, value £1,648,000, in 1857. Of paper there were sent abroad during the three years 7383 tons, value £500,000; 8384 tons, value £572,000; and 8853 tons, value £600,000. Of pre-

pared leather, 4101 tons, value £1,356,000; 4298 tons, value £1,764,000; 4467 tons, value £2,040,000. Of gloves and leather made up, 1825 tons, value £2,060,000; 2303 tons, value £2,812,000; 2535 tons, value £3,280,000; and of £2,00,000; 2003 tons, value £2,512,000; 2505 wms, value £268,000; 6685 tons, value £228,000. The exportations of salt varied from 117,170 tons in 1855, value £84,000, to 229,577 tons, value £160,000, in 1856; and then down to 147,815 tons, value £104,000, in 1857. The exportations of silk, raw and dyed, also fluctuated from 395 tons, value £1,148,000, in 1855, to 493 tons, value £1,576,000, in 1856, and to 474 tons, value £1,532,000, in 1857. Of tissues (linen, woollen, silk, and cotton) there were exported during the three years (linen, woollen, silk, and cotton) there were exported during the three years 20,239 tons, value £24,380.000; 20,375 tons, value £29,056,000; and 20,796 tons, value £27,940,000. Of refined sugars, 32,263 tons, value £1,302,000; 35,766 tons, value £1,432,000; and 33,939 tons, value £1,304,000. Of glass, 29,276 tons, value £660,000; 30,490 tons, value £748,000; and 30,605 tons, value £800,000. Of porcelain and pottery, 8676 tons, value £352,000; 11,019 tons, value £456,000; and 12,052 tons, value £464,000. And of various goods the values exported were £17,451,000, £21,192,000, and £23,688,000.

The exportations of gold were £3,388,000 in 1856 and £4,916,000 in 1857; and of silver, £15,740,000 in 1856, and £18,324,000 in 1857.

The value of the gold coin struck off under the reign of the Emperor Napoleon III., up to 1859, was 3,468,265,980f =£188,730,639, and that of silver coin

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III., up to 1859, was 3,468,265,980f =£138,730,639, and that of silver coin 180,085,578f.=£7,203,423; from 1793 up to 1859 the total value of the gold and silver coin struck off in France was 9,711,559,942f. or £388,463,997.

The quantity of wine consumed in Paris in 1858 was 1,456,145 hectolitres in casks, and 12,367 hectolitres in bottle; of alcohol the quantity was 80,470 hectolitres, and of cider 20,878 hectolitres. Of meat it was 28,136,473 kilogrammes; of sea fish, 9,222,820f. worth; fresh water fish, 1,076,154f.; oysters, 2,053,072f.; poultry and game, 18,315,708f.; butter, 19,328,785f.; eggs, 9,641,744f.; and fuel, 406,590,121 kilogrammes.

The table on the next page shows the extent, nature, and value of our exports to France during the last six years.

A return of the Articles of Home, Colonial, and Foreign Merchandise, and their Values, exported from the United Kingdom to France during the years 1854—1859, respectively; distinguishing the Produce and Manufactures of the United Kingdom from those of the East Indies and Her Majesty's Colonial Possessions, and of Foreign Countries:-

			QUANTITIEN	TITLEY					DRCLAR	DECLARED VALUE.		
OF THE UNITED KINGDOM.	1854.	1855.	1856.	. 1857.	1858.	1859.	1854.	1855.	1856.	1857.	1858.	1869.
Anothecary wares - value	 	 -				1	£16,185	£10,607	£7.743	£10,881	£10,814	£18,386
Annarel slone & haherdash	1	ı	i	i	1	ş	84,771	48,230	3	80,848	26, 282	269,68
•	198	6,164	1,441	8,706	2,135	1,895	2,759	14,596	6,259	12,878	7,184	7,638
	6,294	230	8,158	873	23.	13,046	86,068	4,917	18,767	1,419	745	61,930
Beer and Ale - barrels	2,038	269.	4,601	4 869	4,209	4,802	90,080	11.938	16,739	16,944	12,408	12,790
Books, printed - cwts.	25	8	670	194	629	521	1967	11,120	10,689	14,130	10,236	99.
one, manufac. o	1	ı	ı	ı	1	1	37,144	11,632	200	0	17,019	1,366
Cement cwts.	66.41	169,792	204 264	908,479	302,141	877,148	163 G	686,58	8,683	27,355	84,008	46,429
Clay, China clay . "	113,696	121,860	148,162	187 818	178,180	263,755	196	9,922	2	10,040	100	264,02
Coals, cinders and culm tons	814,837	938,180	1,158,313	1,879,133	1,325,330	1,891,009	856, 198	414,437	524,167	074,420	678,232	615,238
-bered-	1,836	4,410	4.773	7.192	4,765	14,000	70.	ROT	200		200	2
Copper, wrot. & unwrot.cwts.	40,288	74,848	79,826	100,327	72,388	89,120	200, LOS	487,448	0,6,0	076	272,628	67,083
•	29	82	84	•	23.717	10,863	811	6	3	181	7.07	908'27
•	17,156	84.450	63,662	72,482	4,227	8,919	67,465	281,062	20,050	000'00%	10,967	982.5
•	16, 107	40,289	13,990	1,4%	13	1	10.619	54.783	9	1,500	1	1
Cottons, by the yard- yards	5,087,563	7,049,674	9,529,495	17,462,579	11,566,075	9,501,637	113,504	125,180	161,960	201,474	192,432	174,441
٠	i	1	1	1	ı	ı	88,196	900.00	25,065	2,008	86,626	2,0
Cotton yarn lbs.	126,048	174,008	125,306	432,382	800,129	860,319	888	7	200	20,812	23,283	83,878
Flax, dressed & undresd.cwts.	11,608	85,546	3,920	6,064	11,494	1,111	20,00	10,000	28.20	200	26,486	7,672
	7.216	15,146	12,016	14,106	10,778	9,864	200	104,370		118,791	91.66	
Hides, raw, cow or ox No.	17,554	600	15,186	1980	2,610	1,436	252.0	196 018	260,63	900	2	1900
	×,116	, y 353	1,127	8	101.1	4,002	100,400	100,418	9	004	20,128	
uron, wrot, or unwrot, { tons	42,874	147,473	173,251	133,639	96,007	82,718	261,046	902,603	1,193,576	792,049	533,676	206,130
້	4.625	6.235	89	2.074	7.5	ı	12,426	14,487	345	6.476	179	1
Lead and shot - tons	1.438	4.362	8	374	191	836	82,149	94,571	22,216	8,881	16,963	18,024
yard - y	1,211,832	1,487,238	1,238,949	1,181,827	1,014,149	1,249,224	61,084	81,394	21,801	74,083	65,465	67,335
radue -	ı	ı	1	1	1	1	4,203	2,614	1,836	1,438	1,795	1,408
٠.	291,983	106,301	361,568	490,004	670,408	766,963	40,427	48,861	10.98	86,116	27.23	69,871
Machinery, stm. engines val.	ı	i	ı	i	1	1	101,000	100	10,012	92,00		1007
On Hanney Chart Borts "	100	1 100 002	007 007	67.63	3 948 070	1 Sec 805	201,000 8 88.8	178	100,440	109 010	200000	975 696
Painters' colours - wains	ا	2					7.982	R-471	9,728	18611	10101	16.524
ware low							10.636			10.00	100	100
ellery and watches	i	ı	ı	1	ı	ı	200017	3	418	78.61	14,90	3
Platting for hats, straw lbs.	8,575	7,139	9,882	18,978	14,298	11,679	8,082	5,526	7,426	12,694	9,946	8,457
Saltpetre - cwts.	8,872	2,736	4,052	4,270	5,216	8,854	12,968	8,769	7,157	10,196	9.67	999
Silk, thrown - Ibe.	104,647	79,349	546,119	452,601	872,936	200,430	90,066	79.0	87 L 986	619,552	272,676	804,568
" Jarra	9/0/200	933,440	442,002	000,500	Toploor	10.13	200,01	170,130		C96'/AT	163,286	112,564
Skins calf undressed doesn	1 2	19 637	7.413	68	\$	1	16,663	90,44	000	02,881	27,100	68.5
	2 194	4.673	6,072	080	200	90 020	0000	18,900	12,807	97.4	9 5	0/1
Spirits - gallone	42,052	3,068,766	8,155,580	2.622.491	29,203	508,659	100	660,180	100 SOB	200 074	9 2	68 286
wire, dec.	1	1	1	1	1	1	218	828	200	940	116	24,349
lin, unwrought - cwts.	200	6,828	9,481	11,784	11,050	21,428	87,990	87,330	24,617	76,116	08,176	131,026

23,680 428,943 64,895 173,658 4,783 176,118	4,574,854	1,500.504.504.504.504.504.504.504.504.504.
22,452 701,090 61,044 195,168 4,414 196,975 253,505	4,863,131	11, 657 12, 657 14, 186 14, 186 14, 186 14, 186 14, 186 14, 186 16, 186 16, 186 17, 186 18,
24,650 623,780 68,836 122,656 5,685 310,764	6,432,650 6,213,338 COMPUTED REAL VALUE	13, 465 13, 465 13, 465 11, 694 11,
18,029 778,331 66,666 62,198 7,146 174,300 827,661	6,432,650 COMPUTED	80.237 23.233 23.233 64.109 64.100 29.77 130.677 11.235 11.486 11.486 11.486 11.486 11.486 11.486 11.486 11.798 11
15,030 747,442 300,882 49,450 10,035 346,666	6,012,658	67,577 24,481 11,300 10,518 10,518 117,518 117,518 117,518 11,519
8,865 520,993 55,462 85,877 104,541	3,175,290	21,677 118,669 1178,669 1178,669 45,640 45,640 45,640 11,786 11,786 11,786 11,786 11,040 40,983 11,040 110,671 110,671 110,671 110,671 110,671 110,671 110,671 110,671 110,671 110,671 110,671
6,170,228 30,152 8,187,283 	Total £	2,503 12,006 12,006 12,006 12,747 12,747 13,747 13,006 11,569 11,
10,769,630 29,733 3,696,809 1,180,672		11.164 1,466 1,466 1,166 1,161
11,313,553 36,849 2,457,090 1,168,608	ities.	1,250 2,447 14,417 14,417 6,53 6,50 1,150
12,031,295 28,257 1,289,961 1,224,048	QUANTERIES	2,099 1,076 11,476 13,535 11,530 11,5
19,773,916 77,743 1,034,805 438,816		6,081 18,488 18,488 18,488 18,488 19,488 18,198 18,
9,509,731 25,138 1,156,889		1,732 98 98,000 17,000 40,000 17,000 40,000 18,000 18,000 19,000 101,991 8,100 101,991 8,100 101,991 8,100 101,991 10,090
The plates - value Wool, sheep and lambe lbs. 9 Woollang by the plece pleces . by the yard yards ! woollen yarn - lba. All other arkides - value	POREIGN AND COLONIAL PRODUCE AND MANUFACTURES.	Bark, Peruvian - ewta. Caoutchono Coopheal Coopheal and part wrought and part wrought midian corn This wheat floar - cwt. Cofton, raw flat, manufac, of of yeal of goat's wool wall indigo lidigo

STIMMARY. AGGREGATE EXPORTS from the United Kingdom to France, 1854—1859.

Yours.	Produce and Manufactures of the United Kingdom.	Foreign and Colonial Produce and Manufactures.	Total.
	Declared Value.	Computed Real Value.	
1854 1855 1856 1857 1858 1859	2. 2,175,290 6,012,658 6,432,650 6,213,258 4,863,131 4,754,864	£. 3,216,175 4,409,223 4,038,427 5,113,465 4,379,070 4,500,504	£. 6,291,465 10,421,881 10,471,077 11,526,623 9,242,201 9,264,858

FRAUDS UPON CREDITORS.—Frauds were frequently committed upon ereditors by secret bills of sale of personal chattels, whereby persons were enabled to keep up the appearance of being in good circumstances and possessed of property, and the grantees or holders of such bill of sale had the power of taking possession of the property of such persons to the exclusion of the rest of their creditors. For the remedy of such collusive practices, the 17 and 18 Vict. c. 36, provides that every bill of sale shall be void unless the same, or a copy thereof, and of every schedule annexed, attestation of executors, together with an affida-vit of the time of making, and a description of the residence and occupation of the person giving the same, be filed within twenty-one days after the making of such bill with the clerk of the docquets and judgments in the Court of Queen's Bench, in like manner as a warrant of attorney in any personal action given by a trader, is now required to be filed.

By sec. 2, in every bill of sale, if subject to any defeasance, condition, or declaration of trust, the same must be written on the same paper or parchment as the bill of sale. Officers of Court to keep a book containing particulars of each bill of sale, and a search to be permitted on the payment of 1s.

FUNDS. In the article under this head in the body of the work, the infor-

mation as to the progress and state of the National Debt was brought down to 1841, but very great alterations have taken place since that period, and I now proceed to show what is the present state of the National Debt and the several stocks of which it consists:-

STATE OF THE NATIONAL DEBT.

			186	50.	185	9.
			Capital.	Annual charge.	Capital.	Annual charge.
Funded Debt Unfunded Debt	***	***	£. 769,272,562 17,756,600	£. 27,687,884 405,072	£. 786,801,154 18,277,400	£. 27,781,718 472,586
			787,029,162	28,025,523	805,078,554	28,304,299

The chief additions made to the National Debt since the details given at page 322, have been as follows:-

In 1843, £44,897 Exchequer bills purchased and converted into stock by the National Debt Commissioners, involving an annual charge of £1359.

In 1844, £15,217 of Exchequer bills purchased, by which an annual charge

was created of £461.

The Irish loan of £8,000,000 at 3 per cent. contracted in 1847, by which £8,939,547 capital was added to the debt, and £270,838 annual charge.

In 1848, £2,288,435 was raised on loan in the 8 per cents., involving an annual charge of £69,339.

In 1853, £1,683,661 was added for Exchequer bills and bonds funded, creating an annual charge of £49,870; and a 3 per cent loan of £16,000,000 was raised, the annuities and interest payable on which incurred an annual charge of £601,670.

In 1856, Exchequer bills to £3,333,250 were funded, and the annual charge thereon is £100,997. Two loans of £5,000,000 each were also raised, which added £10,931,875 to the funded debt, and £331,236 to the annual charge.

The loan contracted to meet the wants of the Irish in 1847 was wholly paid off in five years. The addition made to the National Debt by the Russian war was £36,645,987, and of this £3,536,305 has since been extinguished. But taking into account the subsequent increased taxation, the total cost to this country of the struggle with Russia, cannot be estimated at less than £70,000,000.

Amount of the Funded and Unfunded Debt of the United Kingdom, with the Increase or Decrease thereof, in the various years when War or Peace commenced, between 1691 and 1859.

	1 1			of Debt, and of Increase (*) or Decrease (†).			
War or Peace, and its Duration.	Years.	Funded.	Unfunded.	Total.			
	1691	£.	£. 3,130,000	£. 8,130,000			
		(1,200 000	13,322,925	14,522,925			
War, 7 years to	1697	*1,200,000		*11,892,925			
WEI, / Years so		3,200,000	9,567,225	12,767,225			
Peace, 5 years to	1702	*2,000,000		11,755,700			
roace, o years to		26,078,085		84,699,847			
War, 11 years to	1713	*22,878,085		*21,982,622			
, ,	1	84,766,199		40,379,684			
Peace, 5 years to	1718	*8,688,114		*5,679,837			
2000, 0,000		(49.811.715		54,405,108			
War, 8 years to	1721	15,045,516		*14,025,424			
	1	42,962,486	3,651,397	46,613,883			
Peace, 18 years to	1739	16,849,229	1941,996	17,791,225			
		68,420,147	7,391,985	75,812,132			
War, 9 years to	1748	25,457,661	*3,740,588	429,198,249			
. •		78,759,470	815,555	74,575,025			
Peace, 8 years to	1756	\$ 5,339,323	+6,576,430	†1,237,107			
		129,160,193	3,555,856	182,716,049			
War, 7 years to	1763	 \ *55,400,723		*58,141,024			
	l	{ 124,763,009		127,162,413			
Peace, 11 years to	1774	1 14,397,184		†5,553,636			
		 		231,843,681			
War, 9 years to	1783	88,010,836		*104,681,218			
		3 234,034,716		247,874,484			
Peace, 10 years to	1798	21,261,369		*16,030,80 3			
		522,231,786		537,658,008			
War, 9 years to	1802	288,197,070		*289,778,574			
		528,260,642		547,732,796			
Peace, 1 year to	1803	6,028,856		•10,079,788			
TT 10 4-	1	816,311,941		861,039,049			
War, 12 years to	1815	1 *288,051,299		*313,306,253			
D 4040		{ 752,064,119		775,215,519			
Peace, 40 years to	1854-55	1 164,247,822		185,823,530			
Wan 0 4c	1050 7-	 { 780,119,722		808,108,722			
War, 2 years to	1856-57	28,055,603		*32,893,203			
Pages 9 4a	1050 50	786,801,154		805,078,554			
Peace, 2 years to	1858-59	6,681,482	711,600	†8,030,168			

The following is a brief description of the several Stocks which now constitute the Public Debt:—

Three per Cent. Consolidated Annuities. This Stock, commonly known as the Three per cent. Consols, originated in 1751, when several descriptions that had been previously kept separate were consolidated into one, bearing a uniform rate of interest at 3 per cent. per annum. This Stock constitutes the most important portion of the Public Debt. At the period of its consolidation, it amounted

only to £9,137,812; but in 1858, it stood at £400,829,812.

Reduced Three per Cent. Answittes. This Stock was formed at the same period as the one just described, when it amounted only to £17,701,323. In

March, 1859, the amount stood at £115,104,504.

Debt due to the Bank of England. This debt consists of various sums which have been borrowed by the Government from the Bank, at different periods since its first establishment in 1694, when it amounted to £1,200,000. In 1859 it

stood at £11,015,100.

New Annuities at Three per Cent. formerly Reduced Three and a Quarter per Cent. Annuities. This Stock originated in 1830 by the conversion of the New 4 per Cents., which had been formed in 1822 from the Navy 5 per Cents. holders had the option of receiving £100 of this Stock, or £70 of 5 per Cents., or of being paid off at par. The Stock created in 31 per cents. in 1830, amounted to £150,119,609, and £469,398 of the 5 per Cent. Annuities. In 1844 the rate of interest was reduced to 31 per cent., and the Stock consolidated with several others, amounting to £248,860,663. The amount of Stock paid to dissentients was £103,352, leaving the capital Stock at £248,757,311, effecting thereby a saving of interest to the amount of £621,893 per annum. In 1854 the rate of interest was further reduced to 3 per cent. The present rate of interest on this Stock is not liable to any further reduction until after the 10th of October, 1874. The amount of unredeemed capital in 1859, was £212,661,740.

The sum of the above Stocks comprehends the capital chargeable with the uniform rate of 3 per cent. per annum interest, exclusive of Irish Stock, and in 1859, stood at £739,611,156.

New Five per Cent. Annuities. This Stock originated from the conversion of 1830, referred to above, the holders of which were guaranteed against any further reduction in the rate of interest for 45 years, or until after the 5th of January, 1875. The amount of this Stock in 1859, stood at £430,604.

New Three and a-Half per Cent. Annuities. This Stock was created in 1853, and stood in 1859 only at £240,746.

New Two and a Half per Cent. Annuities. This Stock, also created in 1853, amounted, in March, 1859, to £2,985,472.

The Irish Funds. The total amount of the Irish Funded Debt is about

- £43,000,000, and is made up of the following Stocks:—

 1. The New Annuities at Two and a-Half per Cent., amounting to £3080.

 2. The Consolidated Three per Cent. Annuities, which amounted to £6,373,044 in March, 1859.
 - 3. The Reduced Three per Cent. Annuities, amounting to £122,607.
- 4. The New Annuities at Three per Cent., formerly Three and a Quarter per Cent. Annuities, amounting to £33,983,376.
- 5. Debt due to the Bank of Ireland, amounting to £2,630,769 at 84 per cent. interest.

6. The New Five per Cent. Annuities, amounting to £2000.

The total of the above Stocks on the 5th January, 1858, was £43,114,876.

That portion of the National Debt which consists of terminable Annuities of various descriptions, is not included in the statements of the principal Stocks, but is given in the annual charge. Amongst these are the following:

Long Annuities, which originated in 1780, and subsequently received several additions, but all terminated in January, 1860. They were principally granted as premiums or bonuses to the subscribers to loans. In 1858, the amount was £1,157,710 for Great Britain, and £135,357 for Ireland. By their expiry in

1860, a yearly saving ensued of £1,599,500.

Annuities for Terms of Years. These Annuities have been granted at various

dates, and expire at different periods: they are created under the 59 Geo. III., cap. 34; the 10 Geo. IV., cap. 24; and the 3 Will. IV., cap. 14, in exchange for Stock or money transferred to the Commissioners for the reduction of the National Debt. The amount in 1859 was £930,423. Annuities to the amount of £306,000 per annum ceased in October, 1859. The terminable Annuities

valued by estimate by Mr. Finlaison in 1859 amounted to £3,363,757.

Life Annuities. These Annuities were created under the Acts 48 Geo. III. cap. 142, the 10 Geo. IV., cap. 24, 3 Will. IV., cap. 14, and 16 and 17 Vict., cap. 45, and are payable at the National Debt Office, Old Jewry. The Commissioners grant annuities in exchange for Stock or Money, on single or joint lives, according to the age of the respective parties, at rates set forth in the

last-mentioned act.

In 1829, Mr. Finlaison, the Government Actuary, found that the Tables, which had been used in calculating these Annuities, occasioned an annual loss to the public of about £100,000, owing to the improved value of human life; the consequence was, the introduction of the Tables now in use. The amount of these Annuities chargeable upon the public revenue, on the 31st of March, 1859, was

£1,098,499.

The Dead Weight Annuity. This is an Annuity of £585,740, paid by the public to the Bank of England, and arose out of the pensions due to the Army and Navy, at the termination of the war in 1815, which then amounted to nearly £5,000,000 per annum. It was estimated that the whole of these pensions would terminate in forty-five years, by a gradual decrease annually. By the Act 4 Geo. IV., cap. 22, an annuity was authorized to be contracted for the amount of £2,800,000. The Bank of England agreed to take a part of this Annuity, to the amount £585,740 per annum, for which they paid between 1823 and 1828 inclusive, £13,089,419. The Annuity expires in 1867.

The remainder of the Government Annuities consist of toutines and life annui-

ties, amounting to £5523, granted under various Acts of Parliament. In addition to the several Stocks which have been thus briefly described, are two others, which, though they do not come under the denomination of the Government Securities, are ranked amongst the principal Stocks in which investments are made; of these, the first is-

Bank Stock, the capital of the Corporation of the Bank of England, as a banking company, the origin of which is given elsewhere, amounts to the sum of £14,553,000. The dividends payable on this Stock, during the last seven years,

have ranged between 7 and 9 per cent. per anumn.

East India Stock. The Capital Stock of this Corporation amounts to £6,000,000 sterling. The Company obtained their original charter in the same manner as the Bank of England, viz., by a loan to the extent of £2,000,000 to the Government, which has increased at different times to its present amount. The Corporation ceased to be a commercial company under the 3 and 4 Will. IV., cap. 85, and only act as a political body in connexion with Government. The dividend is fixed at 10½ per cent. on the Capital Stock, or £630,000 per annum, which is paid out of the revenues of India.

East India Bonds. These securities were issued by the East India Company, as security for debt due to the public, in sums of £100, £200, £300, £500, and £1000 each, and payable to the Company at par, when 6 months' interest has

accrued upon them, which is computed up to the day they are negociated, and is payable on the 31st March and the 30th September. £2,905,000 of a 4 per cent, debenture loan was issued in London in 1857, under the Act 21 Vict.,

cap. 3.

The number of fund holders does not vary to any very great extent, the average number in the five years ending 1859, was 267,899 persons. In 1859, of the 266,719 persons entitled to dividends there were 93,296 for dividends under £5; 44,020 under £10; 86,312 not exceeding £50; 22,863, £100; 12,668, £200; 3627 under £300; 2364 under £500; 1168 under £1000; 375 under £2000, and only 223 who drew dividends exceeding that amount.

FURS.—In cold countries furs and garments of skin are more appreciated

than with us, the sheep or lamb-skin jacket, the seal-skin garments, the buffalo robes or bear-skins for sledge use or for wrappers, otter caps, mitts and gaunt-lets, victorines, cuffs, muffs and boas, become essential articles of dress.

The destruction of wild animals by the hunter is enormous in the prairies and wilds of North and South America, the steppes of Russia and Siberia, the jungles of India, and the deserts of Africa. Several ships almost entirely freighted with furs from the Hudson's Bay Company's vast hunting-grounds in Arctic America arrive each season, and an inspection of their stores before their periodical sales in December, January and March, is such a sight as is not often to be witnessed.

It is difficult to calculate the exact extent or value of the fur trade; but eight or ten years ago it was estimated that the fur trade of the world amounted to about £7,000,000 sterling in value, of which Russia supplied one-third.

We imported in 1855 about 4,000,000 skins of wild animals; of these, 2,750,000 were of the smaller animals of the weasel, fisher or marten, and cat tribe, the musquash, nutria, rabbit, squirrel, &c.; 600,000 were seal-skins, and nearly 400,000 were raccon-skins.

In 1856 the skins imported numbered about 3,500,000; of these nearly one-half were re-exported. The extent of the foreign trade in skins and furs is shown by the figures for 1856; and from these it appears that we exported over five millons of skins, of which the declared value was £320,000; of these, 2,882,036 were sheep-skins, undressed, without the wool, and about 1,400,000 hare and rabbit-skins, obtained in the United Kingdom.

Furs have been at all times prized in China as objects of comfort and luxury. In the northern provinces they are used as defences against cold; while throughout the empire they constitute an important part of the dress of every rich noble or ostentatious person. With the least change of air the Chinese immediately alter their dress; and even at Canton, which is under the tropic, they wear furs in the winter. The first cargo taken to China by sea was in 1779, in Cook's ship after he had been killed and they realized £3000.

ship, after he had been killed, and they realized £2000.

In Siberia, sables, martens, stoats, foxes, squirrels and ermines are tracked and trapped by the hunters for their furs. As a general rule, the furs of the eastern are of a better quality than those in the western provinces; but the ermines near the rivers Irtish, Oby, and Ishim form an exception, being of three times the value of those found beyond the river Lena. Skins are disposed of in Yakoutsk to the value, annually, of £300,000 or £400,000 sterling; and furs of more than twice that value are sold in a single town bordering on Chinese Tartary.

The following return illustrates the extent of our foreign supplies and comnerce in Furs:—

An Account of the Number of Furs imported into the United Kingdom in 1856, distinguishing the countries whence imported, and the total number of each exported in the same year.

Badger, undressed:			Beaver, undressed:		
Quantities imported—	N	iumber.	Quantities imported—		Number.
From Russia	_	1.810	From Hanse Towns		3,255
Hanse Towns	Ī	2,412	United States	•	9,541
British North America	•	997	British North America	•	70,012
Other parts	•	43		•	
Omer paras	•	10	Other parts	•	30
					82,828
		5,262	Quantities re-exported		67,273
Quantities re-exported :	:	891	deminion to-exhoused •	•	01,210
damment to exhorate	•	-	1		
		_	Cat, undressed:		
Bear, undressed:			Quantities imported		
Quantities imported—			From Hanse Towns	:	25,099
From Hanse Towns	:	268	Holland	-	1,032
United States	•	2,170	Belgium .	•	2,350
British North America	•	9,175	United States	•	1,360
	•			•	360
Other parts	•	262	British North America	٠	
			Other parts	•	16
		11.870			32,136
Quantities re-exported .		9,157	Om		
Ammunon - A gring non 4		0,101	Quantities re-exported		7,635
-					

Chinehilla, undressed:	Fitch, undressed:
Quantities imported— Number.	Quantities imported— Number.
From Hanse Towns 1,500 St. Thomas 5,000	From Russia 5,000 Hanse Towns 146,667
New Granada . 12,900	Belgium
Buenos Ayres . 8,469	Other parts 900
Сыш	
Peru 82,678	158,955
	Quantities re-exported . \$ 96,188
86,614	, ,
Quantities re-exported • . 28,731	Fox, undressed:
· —	Quantities imported-
Coney, undressed:	From Hanse Towns . 1,588
Quantitles imported—	United States . 44,126
From Hanse Towns 55,640 France 14,382	British North America . 35,598 Other parts 175
British North America 70,733	Osner parter 170
Other parts 1,530	81,487
V 7	Quantities re-exported . ; 79,068
149,285	Gamman 10-dzpotłod . \$ 15,000
Quantities re-exported . 24,150	Fox Tails, undressed:
	Quantities imported—
Down andressed :	From Hanse Towns . 2,630
Deer, undressed: Quantities imported—	. , ,
From United States . : 50,900	Hare, undressed:
British East Indies . 19,359	Quantities imported
British North-America . 1,929	From Sweden 5.911
Other parts 1,731	Denmark 41,010
, ·	Prussia
73,919	Hanover 68,000
Quantities re-experted : 81,852	Hanse Towns 107,425
	Other parts 2,939
Deer, Indian, half dressed:	961 705
Quantities imported—	261,785 Quantities re-exported : 8,600
From British East Indies 1,500	denumines to-exhouser • • s'ann
Quantities re-exported	Vancous and and
	Kangaroo, undressed: Quantities imported—
David Tarifford Assembly Assembly and	From Fernando Po 586
Deer, Indian, tanned, tawed, or dressed:	West Coast of Africa . 500
Quantities imported—	British Possessions on the
From British East Indies . : 9,140	Gold Coast 2,420
British North America . 366	British Settlements in Aus-
Other parts 207	tralia 59
9,718	8,566
Quantities re-exported . 6,823	Quantities re-exported 54
	77 No. 31 3
Ermine, undressed:	Kolinski, undressed : Quantities imported—
Quantities imported—	From Rustia 5,360
From Hanse Towns 93,249	Denmark : 11,145
United States 1,000 British North America . 1,854	Hanse Towns 56,244
Other parts	1
Omorphia 120	72,749
96,523	
Quantities re-exported 1,920	Leopard, undressed:
describes to exherence	Quantities imported — From British Possessions in
Ermine, dressed:	South Africa 23
Quantities imported	British East Indies . 64
From Hanse Towns . 1.300	Other parts
Quantitles re-exported 4	
	Quantities re-exported 17
Richen unduranted.	demining to oviousoft 11
Fisher, undressed: Quantities imported—	Tion undressed :
From United States 3,495	Lion, undressed: Quantities imported—
British North America 14,647	Promo Constant 1 " 100
Other parts 8	Other parts
18,150	144
Quantities re-exported . 4,796	Quantities re-exported : 20

FUR	14	o fur
Lynx, undressed:		Panther (the name) malacens.
Quantities imported—	Number.	Panther (the puma), undressed: Quantities imported— Number.
From United States .	1,501	
British North America	14,182	
Other parts	14,102	.Other parts 3
Other parts		
A. 4111	15,688	16
Quantities re-exported	. 7,059	
		Racoon, undressed:
Marten, undressed:	-	Quantities imported—
Quantities imported—		From Hanse Towns 10,378
From Hanse Towns	. 13,469	United States 481.713
France	. 8,100	Other parts 6.030
United States .	9,809	<u> </u>
British North America	. 180,247	496,121
Other parts	. 152	Quantities re-exported 396,870
	206,777	
Quantities re-exported .	46,367	
•		Sable, undressed :
Wasten talls surfaced a		Quantities imported—
Marten talls, undressed: Quantities imported—		From United States . 844
From Hanse Towns	. 40,230	Quantities re-exported 1,675
France	11,920	
Other parts		Good to the hate in the
Commercial e	. 8,600	Seal, in the hair, not tanned, tawed,
		or dressed:
Orandillas na com cola s	60,750	Quantities imported—
Quantities re-exported	• 500	From Russia 8,883
• •		Nerway 18,280
Minx, undressed :		Denmark . 23,240
Quantities imported— From Hame Towns		Hanse Towns 41,339
From Hame Towns	. 4,710	Holland
United States	. 48,741	United States . 41,264
British North America	. 59,015	Uruguay 17,033
		Greenland and Davis' Straits 87,053
	112,466	DITUMENT PROPERTY AMERICA . 37 1,378
Quantities re-exported	. 46,171	Other parts 7,619
		•
Minx, dressed:		681,234
Quantities imported—		Quantities re-exported 3,695
From France	. 500	
United States	. 80	Squirrel or Calabar, undressed :
Childa blades	• •	Quantities imported—
Omen#144 ex ma compand a 3	580	
Quantities re-exported 4	578	2,110,001
		Other parts . 10,046
Musquash, undressed:		
Quantities imported—		2,188,737
From Hanse Towns .	. 23,650	Quantities re-exported 1,829
United States	838,758 827,500	***************************************
British North America	. 827,500	Contract on Calaban A
Other parts	. 522	Squirrel or Calabar, tawed: Quantities imported—
	1,190,430	Other parts . 1,012
Quantities re-exported .	529,664	Automa Battela
Nutria, undressed:		1,014
.Quantities imported—		
From Uruguay	. 21,400	Squirrel or Calabar talks, undressed
Buenos Ayres .	1 150,248	(entered at value):
Other parts	. 4,178	Value of quantities imported— Value.
_		From Hanse Towns £4.119
	175,821	Other parts . 1,203
Quantities re-exported	8,949	
	70.00	£5,320
Otter, undressed:		Value of quantities re-exported . 925
Quantities imported—		
From Hanse Towns	. 2.514	Omen on the second
United States	2,198	Swan, undressed:
British North America		Quantities imported— Number.
Other parts	15,111	From Holland 1,771
control better	. 107	British North America 646
		Other parts 1
Omentities no avnowed	19,930	
Quantities re-exported .	16,464	2,8
		

Tiger, undressed: Quantities imported— From West Coast of Africa British Possessions in So		umber. 18	Wolf, undressed: Quantities imported— From Hanse Towns United States	•	umber. 960
Africa . British East Indies . Other parts .		33 166 27	British North America	:	9,547 9,885
Quantities re-exported :		244	Quantities re-exported .	•	836
dements to exhause a	•		Wolverines, undressed: Quantities imported— From United States British North America	:	9 1,065
Weasel, undressed: Quantities imported.— From British North America		94	Quantities re-exported .		1,067
			•		

An Account of the Number and declared VALUE of Skins exported in the Year 1856, distinguishing those of the produce of the United Kingdom from FORRIGN SKINS dressed or otherwise prepared in this country.

British Skins exported in the year 1856: Calf, undressed, 12,194 dozen Coney and Hares, 1,381,298 Sheep, dressed in the wool, 358 cwt. ————————————————————————————————————	. 116,550	Foreign Skins (British dressed), exported in the year 1856: Goat and Kid, 177,311 Musquash, 738,137 Nutria, 1,300 Seal, 63,040 Squirrel, 172,890 Other kinds, not distinguished in the entries	Declared Value. £14,718 43,945 152 35,405 5,800
in the entries	2,579	Total Number, 4,836,454	£820,044

The vast territories of the Hudson's Bay Company, forming great hunting grounds for fur-bearing animals, furnish the largest quantity of furs used in trade. Russia is next in importance, but it has a different race of animals. The fur produce of the United States and of Canada is also considerable.

The average annual value of the peltries exported from America by the Hudson's Bay Company between 1827 and 1833 amounted, according to Mr. McGregor, to £210,000, of which possibly one sixth part was received from the territories west of the Rocky Mountains. Mr. Wyeth estimated the amount of the furs derived from those territories by the Company in 1836 at about £28,000 London price, for which is given about £4000 worth (prime cost of goods), the services of 350 men, employed in various parts of the business, shipping to bring supplies and take back returns, and two years' interest on the investments.

Mr. Alex. Simpson estimates the entire value of the furs and other articles nn. Alex. Simpson estimates the entire value of the first and other articles traded by the Company from the Indians, in all its territories and possessions, at rather less than £200,000 per annum; but, he adds, that in the year when they reached £211,000, the net profits were declared at £119,000. The average profit on £200,000 is said to be £110,000. The entire stock-in-trade of the Company is not more than £400,000. The shares which were originally worth £100 each, are now worth £225.

The average value of the annual export of furs by the Hudson's Bay Company of late years has been about £360,000. At their half-yearly sale in April,

1857, the proceeds were £230,000.

A large proportion of furs used in America and elsewhere, are cured and dressed in London; and although England does not use expensive furs, yet

London is the great fur mart of the world.

The ermine is considered the most precious, and next to that the Russian sable; but the real sables are rare, for according to our latest Russian statistics, only 55,000 skins of the beautiful little animal were produced during an entire year in the Czar's empire. The prices paid for them are almost fabulous, a fine set being worth £400. The sable fur lining of one of the Emperor's cloaks, shown to the Exhibition in 1851, was valued at £1000. Next to the sable in popularity and costliness, ranks the marten or American sable—a fur rich and high-priced, and so fashionable as to be almost universally sought for. The Hudson Bay sables are next in value, and are almost as expensive as the Russian. Next is the mink, pre-eminent for beauty, wear and durability. It is not, perhaps, so delicate looking as the stone marten, or so artful looking as the African monkey, or so captivating as the ermine; but is quite as graceful and more thrifty than them all. Besides the mink, the stone marten, the fitch, the Siberian squirrel, and the Persian and Russian lamb, are in daily use. The skin of the black bear forms the most magnificent sleigh robes—a good turn-out of which, including robe and apron, costs upwards of £20. The Canadian furs most estemed in Europe, and of which they have no representatives, are the black fox and the silver fox. These are found only in the Hudson's Bay Territory, or on the north shore of the St. Lawrence. The raccon and the musk-rat are also confined exclusively to the American continent. In England valuable furs are but little worn—the climate not requiring the lengthened wear of furs at any one time. The musquash, the rabbit, and the American hare, dyed, form therefore the bulk of the furs worn here.

The aggregate value of furs exported from St. Paul, Minnesota, in 1858, was £32,204; in 1857, £36,500; and in 1856, £19,350. The apparent decrease in 1858 was not in quantity, but occasioned by the decreased value of the furs. St. Paul is becoming a great depot and outlet for the fur trade. Prior to 1844 the entire fur product of the Red River valley, North and South of the British boundary, was collected by the agents of the Hudson's Bay Company, and sought the seaboard through Nelson's River and Hudson's Bay. In 1844 an effort was made from St. Paul to get the furs of the Red River Valley. The first year only £300 worth came that way; in 1856 the value amounted to £15,000. From Pembina, in 1857, there were received at St. Paul £24,000 worth of furs. In 1858, owing to a failure and scarcity in the "buffalo crop," the amount was

considerably less from that source.

The large overland traffic which has sprung up between St. Paul and the Red River demands new facilities of communication. The immense annual caravans which come from these settlements laden with the products of the chase, and returning with the proceeds of their barter, is an interesting characteristic of trade. In 1858 the aggregate arrivals of the Red River carts, those ships of the wilderness, is stated at six hundred. In 1844 the whole product of that region which sought American channels, was conveyed in six carts.

The superiority of the outlet at St. Paul for the Red River region over the multitudinous portages of Nelson's River, has been abundantly proved. Establish a railroad communication with the Red River valley, and the whole trade of the Hudson's Bay Company would seek the avenue of exportation through St. Paul. The annual export of furs from the basin of the Winnipeg, directly tributary

to St. Paul, is about £200,000.

VALUE of the SKIMS and FURS imported and exported from the UNITED STATES.

			Imports.	Exports, Produce of the Unite
		i	£	£
1849	•	• 1	120,300	181,945
1850			203,000	170,500
1851			197,630	195,552
1852	•	• 1	230,215	159,701
1853		. 1	846,704	159,220
1854	-		252,444	177,796
1855	-	- 1	802,247	141,906
1856	•		524,087	190,490
1857	•		471,108	223,310
1858	•		290,448	900,477

Bears are found in considerable numbers in the Minnesota Territory and other parts of the new settled States of America, also in small numbers in Canada and the Lower Provinces, but they are constantly diminishing before the progress of civilization. The black bear is by far the most numerous, but few of the grizly species being found. An average skin is worth five dollars—a very good one (she-bear), from six to seven. They are principally used for saddle housings and harness trimmings, and sometimes for sleigh robes. Their hides are best when just issuing from their winter's sleep; and at that season the Indians are reaping their bear harvest.

Two or three thousand bear-skins are annually imported by the Hudson's

Bay Company, and as many more from the United States and Canada, &c.

The buffalo is the monarch of the peltry tribe in the "Far West" of North
America. Immense herds of these animals range the vast prairies extending from the Mississippi to the Missouri. The luxurious meadows furnish them with abundant subsistence the year round. They are not met with till you advance some two or three hundred miles west of the Mississippi, to the head waters of the Missouri or its tributaries. Incredible numbers, amounting, as was estimated, to several hundred thousand in a drove, were seen by Governor Stevens and his party in the summer of 1853, on his survey of the Northern Pacific Railroad route. Two days were required to pass some droves, from which it may be inferred that they were from forty to fifty miles in length, extending on either side as far as the eye could reach. Some of the mules and horses getting mingled in the droves, it was found impossible to retake them, and they were lost.

The skins dressed in the Indian fashion with the hair on, and termed buffalo robes, make admirable defences against the cold, as blankets, sleigh wrappers, &c.

The average price of buffalo robes in the Minnesota Territory is about four dollars wholesale, and seven or eight retail. Very large black robes sometimes

bring as high as ten dollars cash.

The number of buffaloes annually slaughtered on the Missouri plains is estimated at 400,000. 150,000 buffalo robes are received at various fur stations, and 100,000 buffaloes are supposed to be killed by the Indians merely to obtain their skins for tent coverings. Of the remaining 150,000, some are diverted to the use of blankets, saddles, skin boots, &c., a large number also freeze or starve to death in winter in the snow banks, which for months are found in drifts of from five to ten feet in depth, and many of them are drowned in crossing the Missouri river in large herds, by crowding one upon another. These hides are, of course, lost. In a very few years the buffalo will be extinct, for they are now slaughtered with a recklessness that destroys as if they were inexhaustible and innumerable.

One steamer brought down in 1853 to St. Louis, from the Kansas river, 4000

packs of buffalo robes, valued at £32,000.

The average annual return of the buffalo robes purchased during the last eight or ten years is as follows:

American Fur Company Hudson's Bay Company All other Companies	•	:	Robes 70,000 10,000 10,000
· -	•		90,000

In the north-west the Hudson Bay Company purchase from the Indians but a very small number; their only market being Canada, to which the cost of transportation nearly equals the produce of the furs; and it is only within a very recent period that they have received buffalo robes in trade. Out of the great number of buffalos annually killed throughout the extensive regions inhabited by the Camanches and other kindred tribes, no robes whatever are furnished for trade. During only four months of the year (from November until March) are the skins good for dressing; those obtained in the remaining eight months being valueless for traders; and the hides of bulls are never taken off or dressed as robes at any seasos. Probably not more than one-third of the skins are taken from the animals killed, even when they are in good season, the labour of preparing and dressing the robes being very great, and it is seldom that a lodge trades more than twenty skins in a year. It is during the summer months and in the early part of autumn that the greatest number of buffalos are killed, and yet at this time a skin is never taken off for the purposes of trade.

It appears by an official report that the whole number of animals killed by the hunting tribes in 1854, 1855, and 1856, was as follows: Bears, 4733; beavers, 11,497; black muskrats, 110,941; cross foxes, 1650; deer, 59,928; elk, 16; fawn, 5069; fisher, 6078; grey fox, 32,985; red fox, 5088; lynx, 1230; marten, 21,522; mink, 306,086; musquash, 2,472,381; opossum, 65,329; otter, 8596; raccom, 1,134,301; silver fox, 333; sable, 320; silver grey rabbit, 2095, and sea otter, 362.

The following is a return of the yearly importations of furs by the Hudson's Bay Company from their possessions about Hudson's Bay, in the past four years. The aggregate number of skins would seem to be declining, but it is chiefy in the more common kinds of peltries, for the higher priced ones, such as the foxes, otter, bears, wolf and wolverine, racoon, &c., are still obtained in large quantities:

Ski	D.S.	1856.	1857.	1858.	1859.
Beaver Bedger Bear Fisher Foz, Silver Foz,		 61,789 785 8,803 4,885 8,07 2,686 9,749 1,715 5,668 18,907 144,461 40,378 280,543 8,984 70,685 7,728 646 8,786	67,618 1,090 3,199 4,886 828 2,718 9,851 2,168 9,811 20,794 110,845 43,318 290,112 9,822 60,929 187 588 8,124 775 6,789 648	72,241 1,285 3,566 5,189 894 3,307 10,295 1,546 28,102 108,752 40,836 219,829 9,968 54,518 85 498 8,460 829 12,007 697	68, 299 1,503 3,653 4,750 946 3,176 10,277 1,920 4,566 21,549 86,248 33,895 170,893 8,641 42,302 45,642 9,141 840 8,158 900

The Company's importation from the North-west coast of America has to be added to the foregoing, and comprised in the last two years the following number of skins:

Skins.	1858.	1859.	· Skins.	1858.	1859.
Beaver Badger Bear Deer Flaher Fox, Silver , Cross , Rod Lynx and Cat Marten Mink	17,468 84 4,677 1,837 988 194 568 607 4,889 26,217 20,485	20,015 64 3,951 2,689 1,341 171 549 518 1,615 12,150 11,339	Brought up Musquash - Otter - Sea Otter - Tails - Rabbis Racoon - Seal, Hair - Wolverins -	57,473 14,129 2,506 301 30 186 41,018 1,902 12,892 785 420	54,612 5,251 2,267 147 24 40 2,210 2,296 10,423 406 468
Carried up	57,472	54,612	Total -	162,125	78,144

GAS COMPANIES.—In the United Kingdom 991 cities and towns are furmshed with gas. Of these 95 are supplied by municipal corporations or private individuals, and 896 by trading companies. In Scotland 149 towns are lighted without, and eight with special Acts of Parliament. In Ireland 52 towns are lighted without, and four towns with special Acts of Parliament. In England 533 towns are lighted without, and 150 with Acts of Parliament. The sum expended by the 839 gas companies in England, Ireland, and Scotland amounts to pended by the 839 gas companies in Engand, reland, and Scottand amounts to £25,041,309, and by the private individuals and corporations on the remaining 95 gas works to £2,114,595, being a total of £27,155,814. A ton of English gas coal will yield 9000 cubic feet of gas, 14 cwt. of coke, 10 gallons of tar, and 10 gallons of ammoniacal liquor, while the light from each ton is equal to 420 lbs, of sperm candles. A ton of Scottch cannel coal will yield 11,500 cubic feet of gas, 10 cwt. of coke, 14 gallons of tar, and 14 gallons of ammoniacal liquor, while the light is equal to 820 sperm candles; and a ton of Boghead cannel (the Torbane mineral) will give, when manufactured into gas, light equal to 1950 lbs. of sperm candles. The quantity of gas manufactured annually exceeds twenty-five thousand millions of cubic feet.

In London alone 500,000 tons of coal are used by 15 companies, producing 4500 million cabic feet of gas, and 500,000 chaldrons of coke.

GENEVA.—The quantity of this spirit consumed in England is not large, and varies but little from year to year. A good deal, however, comes here for shipment abroad. The following figures give the imports and consumption for the last seven years :-

		Imports.	Taken for Consumption.
		Proof Gallons.	Proof Gallons.
1853		288,520	27,991
1654		184,157	25,765
1855		219,041	26,241
1856		195,895	27,312
1857		178,041	25,929
1858		180,178	26,255
1859		147,950	26,890

GLASS.—The aggregate manufacture of crown and sheet glass in 1830 was about 12,000 tons, valued at £250,000; of plate glass, 1,750,000 superficial feet, weighing about 2800 tons, valued at £280,000, and of rough glass, 400,000 feet, 1000 tons, worth £20,000. Of flint glass, 20,000 tons, valued at £1,000,000, and of bottle glass, 23,000 tons, worth £150,000: in all, £1,680,000. In that year there were 43 glass bottle works in the kingdom, with 87 furnaces and 64 flint-glass works, and 18 crown and sheet glass works, and 6 plate-glass

In 1845 the excise duty on glass, which yielded £600,000, or £700,000, to Government, was given up, and since the remission of the duty the home use of glass and the quantity exported has largely increased.

There was excise duty paid upon 110,000 cwts. of glass of all kinds in 1845, producing a revenue of £115,000. There was a duty levied on window-glass imported of 20s 6d per cwt. until 6th April, 1857, when it was removed.

VALUE OF THE BRITISH MADE GLASS EXPORTED.

1846		•		£262,547	1 1853				£501,936
1847				291,190	1854				549,244
1848				287,574	1858				490,711
1849		-	_	254,350	1856	-	_	-	581,979
1850	-		-	307,755	1857		•		659,007
1851		-		327,950	1858				570,554
1852	-		-	878,897	1859		•		607,578

Since the removal of the excise duty there are no means of ascertaining precisely the quantity of glass made, but the following estimate from competent authorities of the quantity made in 1850 will serve for comparison with the official return for 1840.

	Imp	orts.	Exports of Britis	h Manufactures.
	Window Glass. Cwts.	Plate Glass. Square Feet.	Window Glass. Cwts.	Plate Glass. Value.
1848	81,037	90,442	19,708	£15,242
1649	25,557	68,106	17.386	13,303
1850	21,015	122,894	15.518	18,325
1851	12,298	174,448	16.460	20,929
1852	17,100	150,162	22,168	21,866
1853	27.577	221,304	89,158	48,780
1854	81,639	888,982	85.514	59,294
1855	25,420	749,151	21.537	35,691
1856	80,558	1,059,002	28,500	60,430
1857	56,070	761,790	32,026	87.366
1858	95,582	638,294	26,008	51,760
1859	30,002		27,686	61,133

The imports and exports as regards plate and window glass have been as follows, since the reduction of the duty.

			1840. Cwta.	1850. Cwta.
Crown	_		146,838	240,000
Broad	_	-	9.051	
Plate	-	_	83,623	66,000
Flint	-	-	104,882	400,000
Bottles	-	•	525,720	460,000
			820,114	1,166,000

Our glass manufactures now form a very important item of British industry and the value of that annually produced exceeds in amount £2,000,000 sterling. The exports probably average half a million sterling. In the coarser kinds of flint glass, and in bottles of a common description, the Continental competition in foreign markets is still active against us. In 1849, we imported about 73,000 cwt. of coarse glass bottles, of which 30,000 were re-exported; 26,000 square feet of window glass, of one-ninth of an inch thickness, of which nearly the whole was re-exported; and 68,000 square feet of glass exceeding that thickness, of which 18,000 were re-shipped. We are fast increasing our own production, and since the window duty has been taken off, the demand has largely increased. The imports of foreign glass are now very heavy. In 1851, we imported 12,298 cwt. of window glass, of which nearly all was kept for home consumption. White flint glass goods, to the weight of 102,000 lbs. were imported in 1851, and 551,693 lbs. in 1852, of which all but about 100,000 lbs. were imported in 1831, and 551,693 lbs. in 1852, of which all but about 100,000 lbs. were sold in this country. In 1849, we imported 43,000 cwt. of bottles, but we at the same time exported 232,000 cwt.

In 1854 we imported 31,639 cwts. of window glass (nearly all from Belgium), of which 27,127 cwts. were retained for home consumption, which at the computed value of 14s per cwt., was valued at £22,147. The quantity of plateglass, cast or rolled, whether silvered, polished, or rough, imported in the same year, was 794,194 lbs. At the average price of 9d per lb. fixed for the value, this was worth £29,782. The great bulk of this glass, 514,322 lbs., came from France. This seems principally to have been for export. The computed value of the foreign glass is now somewhat higher; the window glass being estimated at 15s 6d per cwt., and the plate glass at 1s per lb., while the ornamental flint-glass imported is worth about £3. 15s per cwt.

In 1858 we imported the following quantities of foreign glass, chiefly from Belgium, Holland, and France—

Description.	Quantity.	Value.
Window class' and chades and collectors		
Window glass, and shades and cylinders Cwts.	95,582	73,678
Flint-glass, cut or coloured, and fancy ornamental glass - Cwts.	8,952	32,979
Plate-glass - Lbs. White flint-glass, not cut, engraved,	688,994	80,504
or ornamented Lbs.	508,743	8,477
		145,688

With the exception of the cut flint glass, which pays a duty of 10s per cwt. since 4th June, 1853, the importations of glass are free.

Mr. James Hartley, the extensive glass manufacturer of Sunderland, speaking of the progressive increase in the manufacture of crown and sheet glass, ing of the progressive increase in the manufacture of crown and sheet glass, states that in 1844, the last year of the duty, there was made by the fourteen companies then existing, 6700 tons of crown and sheet glass, paying £500,000 duty. There are now ten companies working 40 furnaces, with 284 pots, making 35,500,000 feet annually, equal to 15,000 tons, value £225,000; being an increase of considerably more than cent. per cent., and at a charge to the public of less than one-half that of the former duty. In polished plate there are six companies, the same as previous to the repeal of the duty, but their produce has also doubled. They now make 3,000,000 feet of polished plate annually, equal to 5500 tons, valued at £450 000.

duce has also doubled. They now make 3,000,000 feet of poissed plate annually, equal to 5500 tons, valued at £450,000.

Of Hartley's patent rough plate, the quantity now manufactured annually is 2,240,000 feet of 2 lb. to the foot, valued at £30,000.

In 1825, the window duty was repealed on all houses having not more than seven windows, and in 1851 the duty was abolished altogether, and an inhabited house duty imposed instead. The following shows the number of houses charged with duty in Great Britain, and the revenue brought in—

Years.		No. of Houses.		Daty.	
1820 -		968,008	•	£2,578,581	
1830 -	•	871,42 7	-	1,244,128	
1840 -	-	394,036	•	1,350,930	
1850 -	•	492,833	-	1,770,603	
1951	_	<u>•</u>		1 070 000	

The abolition of the excise duty on glass, and the assessed tax on windows, gave a great impetus to the enlarged use of glass in large buildings, and the number of windows in dwelling houses; and the construction of green-houses to

new buildings have been also greatly extended.

The produce of the little kingdom of Belgium—the greatest glass producing country in the world—is 50,000,000 feet of sheet glass annually, equal to 22,300 tons, or 25 per cent more than is made in England of both crown and that the country of sheet glass. They export of this quantity about 85 per cent., of which 6 per cent. comes to England. England retains 85 per cent. of its produce for home use, and exports 15 per cent.

The exports of crystal and mirror glass from Belgium have been to the undermentioned amounts in the years named:—

Years.			Crystal—Kilogrammes.	Mirror Glass.		
				Value - France.		
1850	-	-	1,249,541	890,826		
1851	-	-	706,805	960,625		
1852	-	-	815,258	12,437,858		
1853	_	-	1,100,319	1,228,575		
1854	-	-	1,856,736	. 1,524,948		
1855		_	1,514,406	1,272,789		
1856	_	-	1,835,063	1.826.427		

The total value of the exports of glass from Belgium of native manufacture in 1855, was £391,000.

The following shows the Imports of Glass from Belgium in kilogrammes of 21 lbs. for six years.

COUNTRIES.	1851.	1852.	1858.	1854.	1855.	1856.
United States England Holland Hamburg Turkey Other Countries	5,213,099 1,980,241 1,920,439 1,337,411 1,085,118 3,144,694	4,948,588 1,865,896 1,848,428 1,661,682 1,215,312 4,908,762	7,878,668 2,965,150 1,835,498 1,532,211 1,151,780 5,244,568	11,112,534 4,306,675 2,628,817 2,098,508 1,299,762 8,815,313	6,946,189 2,859,131 2,186,004 2,063,539 1,252,411 6,456,723	7,250,767 2,900,322 2,289,874 2,046,496 3,032,576 5,159,459
	14,681,002	16,443,568	20,607,865	27,261,609	21,768,996	22,679,494

GIOVES. The imports of foreign made kid gloves have largely increased of late years. In July, 1842, the duty was fixed at 2s 5d per dozen pairs for habit mitts, and 4s 8d for women's mitts, and 3s 8d for gloves. In 1860 the duty was removed. The number of pairs imported on which duty was paid in 1858, was 3,637,178, of the value of £365,963, and the duty received amounted to £49,172.

GOLD.—Since the article on Bullion in this supplement has been printed, some official details have been laid before the Statistical Congress held in London by the delegates from the Australian Colonies, which rate the production of gold there, up to the close of 1859, at £101,371,828; made up as follows:—

Raised in	New South Wales				£7,253,616
19	Victoria				93,810,212
19	South Australia		•	ı	160,000
**	Tasmania	•		-	8,000
99	New Zealand .				140,000

£101,371,828

About £25,000,000 of the Californian gold has been coined at the San Francisco Mint, and about £85,000,000 at the whole of the United States mints; £5,000,000 of the Australian gold has been coined at the Sydney Mint. In France the excess of imports over exports of gold, from 1847 to 1859, was £36,485,305, and within the same period the gold coined in France amounted in value to £138,730,639.

According to Baron Humboldt's estimates, the Mexican mines produced-

From the Conquest to the year 1800, the sum of Colnage of the Mint of Mexico, from 1800 to 1856

Colnage of provincial Mints to 1856

Dollars.
1,973,947,233
283,631,288
425,183,586

Since 1856 there is no reliable return from the provincial mints. The entire coinage, however, of the country and capital may be fairly taken at an annual average of 16,500,000 of silver and 1,000,000 gold dollars; and it is estimated that bullion and specie are smuggled out of the country, on the Pacific and on the northern frontier, to the value of 7,000,000 dollars annually. This supply is susceptible of immense increase, when the state of the country may invite immigration. Silver, especially, seems to be inexhaustible.

migration. Silver, especially, seems to be inexhaustible.

Of £45,090,824 gold imported into the United Kingdom in the years 1858 and 1859, the sums drawn from the several mines were as follows, from—

		1000.	1809.
Russia ,		£1,446,813	£2,070,066
Australia .		9,064,768	8,694,566
Mexico and South A	merica	8,848,419	1,738,700
United States .	•	4,502,464	7,909,842

In consequence of the very general introduction of plated and alloyed goods,

the manufacture of gold and silver plate has not made much progress. The following table shows the number of ounces of gold and silver plate upon which duty was paid, and the quantity retained for home use, in 1825 and in 1850:-

		Du	ty Paid.	Retained i	or Home Use.
		Gold.	Silver.	Gold.	Silver.
		Oz.	Os.	Os.	0 <u>s</u> .
1825	:	7663	1,258,658	7624	1,188,176
1850		7378	785,865	78 70	659,106

. The improvement that has been made in the manufacture of plated wares has had a great influence in diminishing the sale of real plate, although it may have led to an increased consumption of the precious metals.

There are no means for obtaining correct returns of the quantities of gold and silver annually consumed in the manufacture of gold and silver wares in the United Kingdom. It must, however, be very considerable, as articles of precious metals are produced in almost all large towns. The chief seat of electroplating is at Birmingham. It has been ascertained that not less than one thouplating is as briminguals. It has been secondarious and the total the consumption of gold leaf in eight manufacturing towns is equal to 584 ounces weekly. For gilding metals by electrotype and the water gilding processes not less than ten thousand ounces of gold are required annually. At the present time the thousand ounces of gold are required annually. At the present time the consumption of fine gold and silver in Europe and the United States is estimated at £10,000 annually.

According to the returns of the French Mint authorities, the manufactures of the French silversmiths, goldsmiths, and jewellers, consume annually gold to the value of 32,489,720 francs, and silver to the value of 14,226,204 francs, the total value being upwards of one million sterling. It is estimated that the labour employed upon these metals about equals the value of the raw material. Thus the annual value of the manufactures sent forth to the markets of the world by French goldsmiths, silversmiths, and jewellers is upwards of two millions sterling.

GREECE.—The population of Greece in 1853 was 1,043,153. The revenue in 1858 was £652,689. The entries of vessels at the port of Piraeus in 1857 numbered 643, of 146,629 tons, with cargoes valued at £340,000. At Patras in 1856, 718 vessels and 62,297 tons entered, with cargoes valued at £296,000, The value of the imports into the kingdom in 1853 was £721,783, and of the exports £321,032, exclusive of currants.

GUANO.—The great importance of the trade in this fertilizer will be seen from the following details. Although small supplies are brought from other quarters, yet it is to Peru that we mainly look for the bulk of our imports, and the Peruvian guano is also the most valuable, containing the largest portion of

The exportation of guano began in 1841, under contract with the house of Messrs. Queros, Allies, and Co. Subsequently Messrs. Anthony Gibbs and Son were appointed agents for the United Kingdom, and in 1856 they were requested by the Peruvian Government to take charge also of the guano sales in Spain, previously confided to Messrs. C. de Murricta and Co., which they undertook at a voluntary reduction of one per cent. on the former commiss ion. A change of agents in the United States also caused a considerable saving to the Peruvian Government in the commission and charges.

In introducing to the National Convention a bill to authorise the sale of guano on the Chincha Islands, Señor Roca made the following statements:—

The net produce of a ton of guano to Peru, sold in England, is 23 dollars 5 cents.; in the United States it is 21 dollars 5 cents.

The loss to Peru by perils of the sea, waste in loading, transhipment, &c., is calculated at twelve per cent. The quantity of guano on those islands was thus

The North Island, according to the estimate of Señor Faraguet, a French engineer, 4,189,477 tons; the Middle Island, according to the estimate of Señor

Castation Canas and others, 2,505,948 tons; the South Island, according to the same authority, 5,684,677 tons. Total, 12,376,100 tons.

This aggregate indicates tons of measurement, which will yield an increase of one-third when reduced to tons of weight, which are those sold in the market. Calculating on this well-known fact, the above 12,376,190 tons will yield 16,501,466 tons weight, or saleable,

The report of Don Geronimo Fernandez, the Government Surveyor of Peru, inserted in El Interprete del Pueblo of Jan. 27, 1852, contained a detailed table of the quantities of guano, from which it would appear that there were then on the

South or Chipena Islands Central or Chincha Isles North or Lobes Islands	: :	•	:	7,891,407 18,360,000 854,016
				37,025,493

This was exclusive of the subterranean deposits of Iquique, Punta de Lobos of the south, and discoveries of other deposits to which he drew the attention of the Peruvian Government, and which he believed to be as rich as the Chincha Islands.

IMPORTS OF GUANO FROM PERU INTO GREAT BRITAIN FROM 1845 TO 1858.

Year.				Quantity. Tons.	Computed Real V
1845				14,000	154,000
1846			•	22,410	346,510
1847				57,762	635,382
1848		•		61,055	671,605
1849		•		73,567	809,237
1850	•		•	95,083	1.045,913
1851	•			199,732	9,197,052
1852				86,293	949,223
1858				106,312	1,169,482
1854		•		221,747	2,439,217
1855				255,585	2,868,380
1856	-			177,016	2,053,386
1857				264,230	8,484,990
1858			:	802,207	8,788,198

1,936,949 22,462,55

The total imports of guano from all quarters in 1859 were very small, only amounting to 84,122 tons. The computed value is taken at £11. per ton down to 1854; £11. 4s 6d in 1855; £11. 12s in 1856; £13. in 1857; and £12. 10s 8d in 1858.

During the first ten years the Peruvian Government sold the guano by the cargo of £9. 5s per ton, raising the prices until they reached £12. 10s per ton in 1858, when they were selling the same article in the United States at £11. per ton. On the matter being taken up in Parliament, the prices were, however, equalized to £12. in 1858.

In 1856 the price was advanced in London £2. per ton, and again reduced from £13. 10s to £12. per ton by the agents of the Peruvian Government in the autumn of 1858. This reduction was probably the result of an official letter from Lord Malmesbury, dated the 28th of July in that year, to Senor de Rivero, the Peruvian Minister in this country, urging that a reduction of price was greatly desired, and that it would benefit Peru by causing an increased consumption.

GUANO EXPORTED from Peru by the several Contractors, showing the QUANTITIES SOLD, LOST on the VOYAGE, with the STOCK remaining on hand.

Year.	Total Consignments.	Sold.	Lost.	Stock on Hand,
1840 to 1856 1857 . 1858 (first six n	Tons. . 1,960,079 789,754 lonths) 635,589	Tons. 1,626,405 304,598 66,607	Tons. 23,885 19,156 379	Tons. 316,789 466,009 568,602
	3,385,429	1,997,601	48,420	1,851,401

VALUE OF THE SALES DURING THE PERIOD.

Year.	Gross Produce of Sales.	Charges and Expenses.	Net Produce of Sales.	
1840 to 1856	. £20,052,704	£12,201,776	£7,850,928	
1857 .	. 4,989,423	2,607,574	2,831,849	
1858 (first six mon	ths) 1,114,145	507,988	640,412	
	26,106,272	15,317,888	10,828,189	

GUATEMALA, a Central American Republic, composed of seventeen departments, and comprising a population stated in 1852 at 970,450. The trade of the Republic is shown in the following figures:—

				Imports.	Exports.
1851		•		£316,377	£280,800
1852			•	195,388	178,710
1858				174,766	119,809
1854		•		165,296	406,660
1855		-		241,942	256,578
1856	•	•		213,626	848,459
1857				226,987	823,678
1858		•		244,967	890,785

One half of the import trade, and nearly all the export trade, is carried on with Great Britain. The principal exports in 1858 were indigo, 259,000 lbs; cochineal, 1,984,640 libras; 43,304 hides; 1865 logs of mahogany; 58,299 arrobas of sugar; 1793 bales of sarsaparilla; and 1020 bales of country ma-

At the Atlantic ports in 1858 there were 104 arrivals of vessels of the burthen of 6007 tons; and at the Pacific ports 42 vessels of 14,036 tons, making a total of 146 vessels of the burthen of 20,043 tons.

The Custom-house value of the imports amounted to 1,223,770 dollars, upon which duties were paid to the amount of 327,875 dollars. The value of the exports was 1,924,509 dollars; thus leaving a balance in favour of the export trade of the country of 700,739 dollars.

The exports of the woollen manufactures of the Republic are on the increase,

and for the first time flour has been exported.

GUIANA, BRITISH. The resources of this Colony are considerable, and progressive, and its exports have always of late years considerably exceeded the imports. The imports in 1855 were to the value of £886,016, and the exports £280,879. From January, 1841, to June, 1858, £846,154 was expended by this Colony for immigration, of which £691,777 was paid out of the colonial

funds, and the rest by the planters.

GUNNY BAGGING or GUNNY CLOTH. This strong sack cloth is made from jute, a species of Corchorus in Bengal, and from Sunn fibre (Crotalaria junces) in Bombay and Madras. Large quantities are used in the East as a wrapping material for bales of rice, spices, cotton, and other dry goods. There is a large demand in the United States for gunny-bagging to pack the cotton for shipment, and as it takes about six yards for every bale, a crop of 3,500,000 bales requires 21,000,000 yards of bagging, about one-third of this supply is imbales requires 21,000,000 yards of bagging, about one-mind of an supply as imported gunny cloth from Bengal, the rest and what is used for other packing purposes, is principally hemp bagging. The shipments from Bengal average about 9,000,000 pieces, and from Madras and Bombay about 11,000 bags.

GUTTA PERCHA, an elastic gum-like caoutchout or India rubber, which exudes from a tree growing in Borneo, Singapore, and other parts of the East.

The first specimen seen in England was sent to the Society of Arts in 1843 by Dr. Montgomerie. The first articles made of it were a lathe band, a short piece of pipe, and a bottle case, which were presented to the Society in 1844. Being impervious to water, the uses to which gutta percha has been recently applied have become too many for enumeration. In 1844 only two cwt. were shipped from Singapore experimentally. In 1845 the exports rose to 169 piculs; in 1846 to 5354, in 1847 to 2026 piculs. The piculia 1821 lbs. In 1868 the im-1846 to 5364; in 1847 to 9226 piculs. The picul is 1334 lbs. In 1858 the imports into the United Kingdom were 19,641 cwts., valued at £127,908. One of the largest demands at the present time for gutta percha is for casing or insulat-

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ing copper electric wires in submarine cables.

HAMBURG. This large city with a population in 1858 of 222,879, is the most important maritime centre of commerce in Germany, being the main channel of communication between North Germany and foreign countries. Its trade with Denmark, Sweden, Norway and Russia is also most extensive. The revenue of the city in 1859 was £604,031, and the expenditure £622,402. public debt on the 1st January, 1860, was £4,654,869, of which £2,174,925 was for a loan raised in consequence of the great fire in 1842.

The imports from Great Britain into Hamburg in 1856, amounted to £18,062,417, and the imports from Hamburg into Great Britain to £5,571,215,

being a balance in favour of this country of £7,491,202.

The commerce of Hamburg has doubled in ten years. In 1846 the imports were to the value of £21,124,929, and the exports £20,729,405. In 1855 the imports were of the value of £39,641,864, and the exports £38,041,520. The exports of British manufactures to Hamburg are about £8,000,000 in value, and of foreign goods £2,200,000; and our imports from Hamburg amount to more than £4,000,000 per annum. The value of the Hamburg exports to transation than £4,000,000 per annum. The tie places in 1856 was £4,969,190.

The value of the imports, in 1858, was as follows:--

By sea .	•	•	Mares Banco. 214,846,670
By Altona, &c	•	1	49,888,300
By land and river	•	•	237,471,830
			502,206,800
			£37,665,510

The duties which the Hamburg State levies are very moderate, and are raised in a very simple manner. Goods passing the Custom House are never examined, except on information given to the authorities that fraud will be attempted. Goods are allowed to pass the Custom House on the written stamped declaration. on the oath of a citizen, of their nature and value, estimated according to the quotations of the official prices current; or, if there are none such, according to the price of the invoice, with the additional expenses incurred, till the goods reached Hamburg.

In pursuance of the treaty concluded with Denmark for the redemption of the Sound Dues, the sum due from Hamburg, £12,040, was voted by the Bur-

gerschaft, and paid to the Danish Government in 1857.

There is a considerable and yearly increasing amount of maritime insurance

business carried on at Hamburg, which has compelled several of the Insurance Companies to augment their capitals. The sum insured here against sea risk in 1856 was £35,000,000, and it has since greatly increased.

The vessels entered inwards at the port of Hamburg in 1857 were 4306 laden, of 1,136,457 tons, and 761 in ballast of 144,042 tons, of which the English vessels sels numbered 1831, of 616,203 tons, 90 of these being in ballast. The steamers in the same year were inwards, 1235 voyages and 553,761 tons; outwards, 1232 voyages and 530,073 tons. Of these English steamers made 635 voyages, including 313,327 tons. On the 1st January, 1858, there were owned by Hamburg citizens and carrying the Hamburgflag 491 ships, mfeasuring 191,244 tons, and 20 steamers of 16,011 tons.

Hamburg has always been a large emigration port. In 1857, 127 vessels took 31,240 persons chiefly to the United States and Canada. Of these emigration vessels, 90 were Hamburg ships and 14 of them steamers. Very stringent measures have recently been adopted by the different German States with a view

to prevent emigration.

The population of the city and its suburbs was, in 1852, 158,775. The average revenue of the city si about £400,000, and the expenditure slightly in excess of this. The ordinary revenue is derived from land and fire tax, excise, customs, stamp duties, tolls, and ground rents. The expenditure is incurred for the payment of members of the Senate, military and police, harbour expenses, buildings, charitable institutions, and interest and expenses on the public debt. The amount of the public debt in 1852 was £4,990,031, of which a little over £3,000,000 was for the fire loan incurred in 1842. The total number of vessels that belonged to Hamburg in 1855 was 448, of 159,663 tons. The number of vessels that entered the port in 1855 was 4593, measuring 927,006 tons. The imports were in 1846 valued at £22,124,929, and in 1855 at £39,641,864. The exports in the same years were respectively £20,729,405 and £38,041,620. The imports of cotton at Hamburg were, in

	•	•		Raw Cotton. Cwta.	Cotton Yarn. Cwts.
1850	•	:	:	269.021	460,235
	•	•	•		
1851	•	•	•	817,479	481,821
1852				292,973	452,947
1853		- :	- 1	455,306	423,596
1854	•	•	-	567,084	480,546
	•	•	•		
1855				467 709	681 18Q

The other chief imports in 1855 were 506,915 centners (120 lbs.) of sugar, 942,556 do. of coffee, 36,576 of tea, 322,784 of rice, 140,711 of tobacco, 298,222 of dye woods, 14,890 of indigo, and 111,670 of hides, 101,912 of herrings, 807,807 of iron, 205,675 lasts of coal, 123,093 centners of wool, 54,083 lasts of grain,

110,578 centners of clover seed, and 349,210 centners of zinc.

HANOVER.—The population of this kingdom according to the census of 1858 was 1,843,976, showing but a small increase in the last eighteen years. Thecity of Hanover has a population with the suburbs of 53,000 souls. The annual amount of emigration is calculated at 12,000. The arrivals of British shipping at Hanoverian ports during 1858 were 256, with a tonnage of 12,896 lasts, and the departures 247, of 12,896 lasts. The mercantile marine owned consisted of 720 ships of 34,768 lasts, 1950 coasters of 17,343 lasts, and 14 steam vessels of 680 lasts. The total public debt in 1859 was about £9,000,000, of which the greater portion comprised the railway debt, the interest of which was more than covered by the railway receipts. The actual debt of the country may therefore be set down at about £2,368,258. The financial condition of Hanover, unencumbered as it is with any considerable debt, and possessing undoubted elements of future wealth and prosperity, is sound and satisfactory.

HAYTI, see St. Domingo.

HEMP.—The following return continues the account of the imports of Hemp since 1839, given at page 364.

				Hemp Undressed	
			From Russia.	From other Parts.	From all Parts.
			Cwts.	Cwts.	Cwta.
1840			599,078	84,990	684,068
1841			542,764	109,401	652,165
1842			415,565	170,840	585,905
1843		•	468,061	272,682	735,743
1844			655,954	257,279	918,238
1845			603,286	828,564	981,850
1846			620,656	262,238	882,894
1847			542,857	268,708	811,565
1848			536,400	809,871	845,771
1849			636,938	424,955	1,061,893
1850			600,992	447,643	1,048,635
1851			664,580	628,881	1 298,411
1852			537,132	531,094	1,068,156
1853			806,396	412,874	1,218,770
1854			20,539	709,025	729,564
1855			948	727,438	728,881
1856			522,738	948,795	771,538
1857			550,950	231,321	782,271
1858			612,474	974,157	886,631
1859	•		731,661	356,588	1,088,349

HERRINGS.—Some late details respecting the herring fishery have already been given in this supplement, but the annual returns of herrings cured and exported may be brought down, in continuation from p. 365, to the present time.

	No. o	of Barrels C	ured	Barrels	No. of Barrels
Periods.	Gutted.	Ungutted	Total.	Branded	Exported.
Year ended 5th April, 1841 " 1842 " 1843 " 1844 " 1844 Sth April, 1844, to 5th January . 1845 Year ended 5th Jan. 1846 " 1849 " 1849 " 1850 " 1851 " 1851	431,157 489,6304 442,230 478,556§ 398,313 411,971 414,915} 372,9694 392,827 507,0244	126,1052 177,6242 181,1292 191,803 182,7302 191,375 192,5352 189,754 251,0412 263,6732	557,2622 667,2453 623,4193 666,3593 526,0323 532,646 607,451 562,7454 770,6082	154,189 190,922à 162,713 162,713 162,968 140,632 142,473à 156,275à 146,500à 153,944 213,286à	250,137 284,736 291,800å 313,516å 266,373å 242,194 256,714 250,181 243,994 340,256å
for Scotland and the Isle of Man only Year ended 5th Jan. 1852 1852 1854 1854 1855 1856 1856 1856 1856 1856 1856 1856	878,187 417,233 } 875,693 560,367 458,579 } 582,715 } 466,429 } 465,292 } 470,393 } 881,050 }	176,7972 123,0941 217,6792 177,7923 177,9623 183,9861 148,559 114,5211 165,7301	544,009 4 594,031 496,787 4 778,039 4 636,662 1 766,703 4 609,988 4 580,813 2 686,124 491,487 1	172,924} 201,6364 169,1594 248,1364 280,5814 280,5814 223,281 218,992 233,374 158,676	264,904 283,526 342,630 361,696 442,264 347,611 367,160 350,204 272,979

^{*} The Collection of Returns for England ceased from the 5th January, 1850.

HIDES.—Since the removal of the duty on tanned hides, the imports have very largely increased. In 1858 the general imports included the following:—

				Value.
Dry Hides .		cwt.	289,226	991,949
Wet ditto .		79	446,063	1,169,412
Tawed, Curried, &c.		lbs.	1,307,364	117,930
Varnished, &c.		12	879,289	104,796
Tanned .		"	2,198,471	95,503
Russia Leather		"	66,816	7,223
Hide Pieces, &c.		value		5,000
Dressed	•		-	1,491

£2,493,604

HOLLAND —The total population of this kingdom on the 31st December, 1854, was 3,238,753 souls, or an average of 257 to the square mile. In the provinces of North and South Holland it is as much as 550 to the square mile. The area is 12,608 square miles, the province of Limbourg having been added to it, comprising 848 square miles. The average annual revenue in the five years ending with 1855 was £6,000,000. The expenditure in 1855 was £6,145,055. The public debt in that year stood at £99,342,569. The shipping owned in the kingdom in 1855 were 2230 vessels, of 551,854 tons. In the four years ending with 1855,720 vessels, of 180,320 tons, were built in the Dutch ports. The entries of vessels at ports in Holland in 1855 comprised 7788 of 1,303,450 tons, with cargoes, and 469 of 81,093 tons in ballast. The steam traffic is very considerable in Holland, and consisted of 1193 steam vessels, of 349,920 tons, entering with cargoes, and 138, of 57,049 tons, in ballast; 1052 of the entire entries were British steamers.

The following shows the value of the foreign trade of Holland:-

			Imports.	Home Consumption.	÷	Exporta.
1850	:	:	28,701,278	15,698,880		19,166,838
1851			25,332,769	16,697,271	•	20,228,788
1852			26,893,296	17,138,868		22,707,058
1853			26,754,810	17,078,761		22,783,472
1854			29,707,048	90,874,626		25,731,738
1855	÷	•	28,565,505	20,819,156		26,171,089

The number of each kind of live stock in the kingdom in 1854 was 234,193 horses, 2007 asses and mules, 1,144,953 head of cattle, 858,266 sheep, 239,783 pigs, and 101,222 goats. The agricultural produce of the kingdom in the same year was 57,859 quarters of wheat, 1,249,292 of tye, 457,312 of buckwheat, 521,406 of barley, 1,062,132 of oats, 72,070 of peas, and 213,159 of beans, 3,619,564 quarters of potatoes, 189,241 do. of turnips, 31,400 cwt. of hemp, 132,000 cwt. of flax, 59,308 cwt. of tobacco, 9,873 quarters of hemp seed, 31,062 quarters and 560 cwt. of linseed, 212,250 quarters of cabbage seed, 4286 do. of mustard, 5710 cwt. of clover, and 2576 quarters of bird seed.

HONDURAS.—The republic of Honduras comprises the departments of Comayagua, Cholutaca, Gracias Yoro, Tejucigalpa, Olancho, and Santa Barbara, and contains a population of 358,000 souls. The ports are Omao and Truxillo. The imports at the former were in 1858 105 vessels, of 4542 tons, with cargoes valued at £26,417; at Truxillo, 53 vessels, of 3844 tons, with £32,446 in cargoes. The total value of the imports by the Atlantic and Pacific average £140,000 per annum, and the exports are the same. The imports consist chiefly of cotton manufactures, about £70,000; woollens, £11,000; linen and silk, £12,000; hardware and cutlery, glass, china, earthenware, sugar, coffee, grain, and other provisions, drugs, wines and spirits, to the value of £10,000; stationery, leather, and furniture.

HONEY.—During the last four years the following quantity of honey (in cwts.) was imported into the United Kingdom:—

From			1855.	1856.	1857.	1858.
Denmark			172	948	219	18
Hanseatic Towns			139	293	570	60
Holland .			127	276	85	7
Belgium .	•		695	84		ė
France			100	455	419	164
Spain .			_	488	94	71
Portugal		-	455	543	421	448
Tuscany .				_	_	
Jamaica .	:		638	898	1820	781
Cuba .	•		275	201	421	2539
United States	-	:	<u></u> -	157	79	
Other countries	:		273	212	297	848
				-		
Total im	port		2874	8645	3885	4446

HOPS.—The number of statute acres under culture with hops in this country at various periods is shown in the following figures:—

			Acres.				Acres.
1810	-	-	88,265		-	-	44,805
1820	-	-	50,048			-	48,125
1830	_	-	46,726	1859	-	-	47.601

The largest quantity of land under culture with hops in the last fifty years was 57,757 cwts. in 1855. The highest average produce was 13½ cwts. per acre in 1808; 6 or 7 cwts. per acre is, however, about a general average.

By a calculation made from reliable sources, the calculated outlay paid for labour in picking, drying, and preparing hops for market in Kent alone in an ordinary year amounts to upwards of £440,000; and when to this sum are added other incidental expenses, together with additional charges on the revenue for assistants engaged in levying the duty, it will be found that very little short of half a million of money is put into general trade circulation within the county in payment for labour in the process of hop gathering.

A few statistics regarding the highest and lowest scale of duties for a series of years may not be uninteresting or without use:—From 1712 to 1750 the duty varied from £6,526 in 1725 to £91,880 in 1746. From 1751 to 1800 it varied from £14,895 in 1762 to £203,663 in 1794. From 1801 to 1850 it ranged from £15,463 in 1802 to £269,331 in 1826. From 1851 to 1859 it varied from £44,369 in 1854 to £398,635 in 1853. In 1859 the duty was £328,070.

The dates of the occasions when payment of the duty on hops has been de-

ferred are 1820, 1821, 1822, 1823, 1824, 1827, 1828, 1829, 1831, 1849, 1850, 1857, and 15th of May, 1858.

	Lbs. C	harged with Duty.	Exported.	Retained for Home Consumption.
1844	-	29, 285, 004	153,849	29,131,245
1845		82,974,749	151,211	82,828,588
1846	-	50,704,025	448,497	50,255,528
1847		45,134,365	457,061	44,677,304
1848	-	44,343,985	857,029	43,986,956
1849		16,650,915	274,811	16,376,104
1850		48,537,669	270,511	48,267,158
1851	-	27,042,996	904,090	26,138,906
1852	_	51,102,494	955,855	80,146,639
1853	-	81.751.698	802,103	80,949,590
1854		9,877,126	585,168	9,291 958
1858		88,221,004	852,856	82,368,448
1856		55,868,694	1,565,249	54,803,375
1857	_	47,717,561	1,450,104	46,267,457
1858		58,125,101	4,177,251	48,947,850
1859		68,496,727	1,352,728	67,143,999

HOSIERY. The manufacture of hosiery is chiefly carried on in the Midland counties of Nottinghamshire, Derbyshire, and Leicestershire, and a few other small towns in England; at Balbriggan in Ireland; and at Hawick, Galashiels, &c. in Scotland. Hosiery consists chiefly of stockings, socks, drawers, braces or suspenders, gloves, caps, shawls, sheets, &c. made of cotton, wool, or silk. The trade altogether employs upwards of 80,000 individuals, and 40,000 looms. The fixed capital in mills and frames approaches £500,000, and the entire manufacture has been estimated at £4,000,000 annually.

The abolition of the duties on the importation of the raw materials used in the trade, acted very sensibly upon this branch of industry; and since the year 1844, a large increase in the number of machines employed in the manufacture of stockings, &c. has taken place; although the larger proportion of the manufactures are consumed at home, the exports to foreign countries are annually increasing.

creasing.

The following figures, showing the declared value of British hosiery exported in the years 1853-54, 57 and 58, will give some idea of the extent of this trade.

THE HOSIERY TRADE.

	1858.	1854.	1857.	1858.					
Cotton Stockings Hostery and small wares Silk Stockings Hostery and small wares Woollen Stockings Hostery and small wares	£. 461,360 238,025 23,605 43,521 261,259 239,032	£. 185,371 212,705 755 6,681 96,909 126,589	£. 272,109 362,525 17,167 32,702 130,196 222,745	£, 160,811 305,404 6,655 28,796 88,397 425,640					
	1,266,802	630,010	1,057,456	1,015,693					

HUDSON'S BAY COMPANY. This Company, by Parliamentary Committee has been shorn of much of its territory and some of its exclusive privileges of trade. The island of Vancouver, which had been granted to it on lease in 1849, was reclaimed by the Crown and made a Government Colony in 1859. A portion of the Red River territory has also been included in the boundary of Canada. Its fur trade is still, however, a very profitable and important one, and the Company has effected much towards Arctic discovery by means of its employées. Under the head of FURS in the supplement, some details of the Company's trade will be found.

The capital employed by the Company is £1,265,068, and consists of stock standing in the names of the proprietors, £500,000; valuation of the Company's lands and buildings, exclusive of Vancouver's Island and Oregon, £318,884. Amount expended up to September 16, 1856, in sending miners and labourers to Vancouver's Island, in the coal mines, and other objects of colonization, exclusive of the trading establishments of the Company, and which amount will be

repayable by the Government if possession of the island is resumed, £81,071. Amount invested in Fort Victoria and other establishments and posts in Vancouver's Island,—this amount is not exactly ascertained,—estimated at £75,000. Amount paid to the Earl of Selkirk for Red River Settlement, £85,111. Property and investments in the territory of Oregon ceded to the United States by the treaty of 1846, and which are secured to the Company as possessory rights under the treaty, 1,000,000 dols.—say £200,000. The distribution of profits to the shareholders for the years 1847 to 1856, both inclusive have been,—1847, 10 per cent. dividend; 1848, 10 per cent.; 1849, 10 per cent.; 1850, 20 per cent., of which 10 per cent. was added to stock; 1851, 10 per cent.; 1852, 15 per cent., of which 5 per cent. was added to stock; 1851, 10 per cent.; 1855, 10 per cent., of which 5 per cent. was added to stock; 1854, 10 per cent.; 1855, 10 per cent.; 1856, 10 per cent.; 1856, 10 per cent. The price of the stock, ex dividend, was—July, 1847, £200; 1848, £200; 1849, £200; 1850, £210; 1851, £210; 1852, £215; 1853, £225; 1854, £210; 1855, £207; 1856, £200; 1857, £192; 1859, £107; 1860, £190. Out of 268 proprietors in July, 1856, 196 purchased their stock at from 220 to 240 per cent.

240 per cent.

ICE has become an important article of trade in the United States, both for home use and export. Our winters being short, we are also largely dependent on foreign supplies. The exports from the United States to the West Indies, India, and other colonies, is considerable. The city of Boston is the chief port of shipment; 150,000 to 200,000 tons is sent annually from thence to the cities of the Southern States, the West Indies, South America, and India. The cities of New York and Philadelphia consume more than half a million tons annually. In 1858 we imported as much as 10,831 tons of ice.

IMPORTS and EXPORTS. See COMMERCE.

INCOME AND PROPERTY TAX. In 1803 the real property assessed in Great Britain was £967,284,000, in 1812 it was £1,143,216,000, and in 1842 it had reached £1,820,000,000. The gross estimated rental of property assessed to the poor-rate in England and Wales alone in 1856 was £86,077,676. Incomes from trades and professions as assessed to the income-tax were in 1812 £21,217,600, in 1848, £56,990,000, and in 1858, £102,835,990. The amount of property assessed to the property and income-tax in the United Kingdom in the year ending 5th April, 1857, was £266,894,336. If we calculate this income to be worth thirty years purchase, we shall have £80,006,830,000 of personal property in the kingdom, exclusive of the property of all those who are stated to have under £100 a-year income.

In 1854 the property tax was extended to incomes, and brought in £6,614,000 to the revenue.

The rates charged were as follows:-

Years ending 31st of March.	1857.	1858.	1859.	1860.
On Incomes of and above £150	. ls. 4d.	7d.	5d.	9d.
On Tracemen from £100 to £150	. 1114.	i.d	M	RIA.

The gross produce of the Property and Income Tax has been as follows:-

1856			Great Britain. £14.223.900	Ireland. £1.179.001	United Kingdom. £15.402.901
1857		·	15,161,282	1,223,212	16,384,494
1858	•	·	10,870,965	896,841	11,767,306
1859			6,275,357	536,875	6,812,283
1860	•	•	9,757,212	782,871	9,789,483

The total amount of incomes assessed to the tax in 1858 was £103,000,000.

In 1851 the property and income tax was continued to April, 1852, and reimposed in 1852. In April, 1853, it was extended, at 5d. in the pound, to incomes between £100 and £150, and also extended to Ireland. In April, 1854, the tax was doubled, and in 1855 increased on incomes of £150 and upwards 2d in the pound, and on incomes between £100 and £150 $1\frac{1}{2}d$ in the pound. In 1857 a reduction was made on incomes of £150 and upwards from

6d to 7d in the pound, and between £100 and £150 from $11\frac{1}{4}$ to 5d in the pound. In 1858 the tax was reduced on incomes of £150 a year and upwards to 5d in the pound. In 1859, in addition to the rate of 5d in the pound on all incomes above £100 a year, further rates were imposed by the 22nd and 23rd Vict. cap. 18, viz., 4d in the pound on incomes of £150 a year and upwards, and 4d in the pound on incomes between £100 and £150 a year.

The profits of trade on which income tax was charged in the last year (1858-59) was as follows:—

England Scotland Ireland	•	•	•	-	-	•	:	£78,444,000 6,780,000 4,567,000
	lTm86a	A 21.		-		_	_	94 911 000

In the year ending 5th April, 1859, the annual value of property assessed under Schedule A amounted to £137,667,000. The number of persons in Great Britain with incomes above £5,000 was in Schedule D 1359, and in Schedule E 70, and in Ireland under the two schedules $\mathbf{54}$; 55 of these individuals had each incomes exceeding £50,000 a-year.

INDIA (BRITISH).—A recent Parliamentary Blue-book gives the following as the area and population of the British territories in India:—

BRITISH STATES.

Bengal Madras Bombay	•	,			Area	in Square Miles. 573,778 132,090 131,544	Population. 97,763,562 22,437,297 11,790,042
	Tota	1.		N	ATIV	837,418 /B STATES.	181,990,901
Bengal Madras Bombay	•		•	•	:	515,53 3 51,802 60,575	38,702,206 5,213,671 4,460,370
						627,910	48,876,247
Total of Bri	tich (and I	Nati v	e Sta	ites	1,465,322	180,367,148

The revenue of India (in India) in 1856-57 was £31,691,015, and the expenditure £28,079,202, leaving a surplus of £3,611,813. The home charge, however, swept off £3,529,673, thus reducing the net surplus to £82,140. Land yielded a revenue of £17,722,170; excise, £45,685; sayer and akbarry, £1,441,197; and moturpha, £108,418; the Mint yielded £262,409; Postoffice, £183,325; stamps, £622,165; customs, £2,092,644; salt, £2,685,574; and opium, £5,002,400. These were the gross receipts, afterwards reduced, more or less, by charges of collection, &c. The expenditure in India included £2,546,023 (net) for judicial and police charges, £10,795,788 for military charges, £491,186 for marine and pilotage, and £2,240,590 for the interest of debt. The public debt of British India, including the bond debt in England, is £59,461,969, paying an interest of £2,396,084. The bond debt in England figures for £3,915,317. In 1856-57 41,235 vessels of 4,549,278 tons entered and cleared at ports in India. 6949 vessels were European and 34,286 native. The imports into British India in 1856-57 are valued at £28,608,284 and the exports at £26,591,877. Of the imports Bengal took £14,172,485; Madras, £2,540,799; and Bombay, £11,895,660. In the list of importing (into India) countries, the United Kingdom figures for £16,739,897 (or more than one-half of the whole imports); France, for £1,059,507; Sues, for £4,260,725, and China for £2,071,844. All other countries are under £1,000,000. Penang, Singapore, and Malacca are rated at £889,360, and Australia at about £537,000. America makes a very poor figure, only £153,377. From England were imported £1,154,540 worth of cotton twist and yarn, £4,835,957 of cotton piece

goods, £607,464 of military stores, and £825,634 of manufactured metals. All the cotton goods are, as may be anticipated, supplied by England. It must be explained that of the total imports of £28,608,284, about one-half consists of merchandise, and the other of "treasure," in the shape of the precious metals, gold and silver. The exports (£26,591,877) include only £1,233,426 worth of treasure. Bengal exports, £13,443,967; Madras, £2,407,906; and Bombay, £10,740,004. Great Britain is a customer for £10,635,607; the Americas, for £1,380,103; the Arabian and Persian Gulfs, for £1,139,523; Ceylon, for £1,069,320; China, for £8,016,684; and France, for £1,441,736. The exports include £4,437,949 of raw cotton (£3,412,200 to England), £2,025,058 of dye stuffs, £2,587,456 of grain (only £811,270 to England), £7,056,630 of opium, £1,118,654 of seeds, about £1,000,000 of raw and manufactured silk, and £1,786,077 of sugar and candy. The exports of opium are steadily increasing. £6,505,587 worth of opium is exported to China, the great consumer of this invaluable narcotic, £18,785 to New South Wales, £531,219 to Penang, Singapore, and Malacca, and £1039 to "other countries." The actual quantities of the principal articles exported from India are as follows, viz.—319,653 lbs. of raw cotton, 2,181,660 qrs. of wheat, 9,383,925 gunnies and bags, 10,897,930 lbs. of indigo (value £1,937,907),637,416 cwts. of jute, 72,385 chests of opium (value £7,056,630) 28,305,712 qrs. of rice (value £2,301,182), 693,827 cwt. of saltpetre, or nitrate of soda, 2,142,403 cwt. of seeds, 16,602 pieces of Cashmere shawls (value £290,640), 1,756,778 lb. of raw silk, 1,568,571 cwt. of sugar, and 17,253 cwt. of tallow; about 820,000 lbs. of tea and 18,484,666 lbs. of wool.

The declared value of the aggregate of British produce and manufactures exported to India in 1858 amounted to £18,283,852, and the value of the exports to China and Hong Kong to £2,876,447. The exports to India included £9,389,419 of cotton goods, £1,969,227 of cotton yarn, £121,385 of woollen and worsted stuffs, and £489,789 of woollen manufactures. In 1814 the aggregate value of our exports to India was, instead of £18,283,852, only £2,113,473, and in 1826 it was only £3,662,012. In 1840 it had risen to £6,023,192; in 1853 to £8,185,695; and in 1854 to £10,025,469; so that in the space of four years an increase to the amount of £8,000,000 took place. The value of the exports to China in 1827 was £610,637; it is now upwards of £2,500,000. The foreign produce exported to India in 1858 was valued at £660,823, and that to China at £89,122 only. The imports of foreign produce and manufactures into the United Kingdom from India in 1858 were valued at £17,407,185, and the imports from China at £7,043,089, including £5,036,293 of tea and £1,836,645 of silk. Opium figures largely in the trade between India and China. In 1857-8, 37,353 chests of opium, valued at £4,615,630, were exported from India to Hong Kong, and 30,651 chests, valued at £3,625,402, to other ports in China. The total value of the exports of all goods from India to China in 1857-8 was £5,180,496 to Hong Kong, £4,186,341 to the rest of China; total £9,366,837. The total value of imports into India from China was £915,858.

The following is a septennial review of the exports of Cotton, Sugar, Rum and Coffee from India to Great Britain:—

Year.		Cotton.	Sugar. cwts.	Rum. gala	Coffee. lbs.
1831	•••	25,805,153	185,579	2.828	7.547.390
1838	•••	40,217,734	588,465	53,309	7,785,964
1845	***	58.437.426	1.340.678	713,221	21,647,481
1851	•••	84,923,022	1,306,450	298,966	88,530,010
1050	•••	190 700 606	704 401	041 400	46 749 071

Perhaps the statement of the increase of tonnage is the most striking. The number of ships nearly doubled in the three years ending 1st May, 1857.

-	Entered.	Cleared
	Tons.	Tons
1854-55	1,687,379	1,614,877
1855-56	2,077,187	2,129,069
1856_57	2,206,982	9.844.848

The aggregate value of the trade (imports and exports) of India now averages about £37,500,000 sterling, and the revenue £25,000,000. This is exclusive of specie.

The Custom House returns from 1834 to 1857 show that £94,517,189 of treasure (silver bullion and coin) have been landed in India, and of that sum only £18,162,794 have been re-exported, leaving a balance in India of £76,254,395; and of this sum no less than £66,224,174 passed through the mints of Calcutta, Madras, and Bombay, and was converted into Company's rupees. It is asserted by many that the silver is hoarded, but the owners would scarcely have paid seigniorage, and had the silver melted and converted into rupees for the sake of hoarding; and it is more than probable that it was wanted to pay for the annual enormously-increased production of indigo, sugar, oil seeds, lac dye, &c. &c.; improving, therefore, the means of the cultivators. If the period between 1800 and 1835 be taken into consideration, the probability is, that about £150,000,000 sterling of silver have remained in India, realizing, even at this day, the assertion of Pliny, that India is the sink of the precious metals. Indeed, it is currently believed that the aggregate of silver in circulation, or held

in India, exceeds £400,000,000.

The trade of India, although now large, is capable of very great extension. The supplies of Indian cotton to this country have risen to an average, in the last four years, of 186,500,000 lbs., and are progressively increasing, owing to the enhanced demand for this raw material. Large quantities of wool are also now shipped from Northern India, and the other chief exports are hemp, juke, and other vegetable fibres in immense quantities; oil-seeds, pepper, nutmegs, ginger, cardamoms, and other spices; horns, hides, and skins; rice, to the extent of 178,580 tons; indigo, madder, turmeric, and other valuable dye-stuffs; teak wood, silk, and silk manufactures, drugs, sugar, tea, wax, &c. From the vast extent of country and climate, and the industry of the people, now peace and confidence are restored, there is no reason why the productive resources and revenue of India should not be largely increased, and the trade with England and China be more extensively developed. It will be seen by the following summary that, even under the disadvantages of the lately disturbed state of Bengal, the trade has made great progress.

VALUE OF THE IMPORTS AND EXPORTS TO AND FROM BRITISH INDIA IN QUINQUENNIAL PERIODS.

Average of	Im	1		
Five Years, ending	From United Kingdom.	Frem other Countries.	Total.	Imports of Specie.
1839	£3,272,946	£1,697,672	£4,970,618	£2,345,335
1844	5,489,128	2,202,300	7,691,498	2,762,164
1849	6,480,418	2,705,718	9,136,126	8,073,250
1854	8.118.828	2,637,305	10,756,134	4,474,107
1859	12,090,651	8,275,849	15,365,993	11,223,10

Average of	Exp	1		
Five Years, ending	To United Kingdom.	To other Countries.	Total.	Exports of Specie.
1839 1844 1849 1854 1859	£4,163,945 6,745,286 6,457,407 6,782,153 8,782,400	6,908,584 7,044,588 9,217,637 8,117,441 18,405,336	£11,071,580 18,789,770 15,675,044 14,899,594 22,187,786	#251,069 462,791 1,390,503 646,476 850,608

QUARTITIES OF THE PRINCIPAL ARTICLES OF THE PRODUCE AND MANU-FACTURE OF INDIA IMPORTED INTO THE UNITED KINGDOM. (Continued from page 378.)

		1840.	1845.	1850.	1855.	1858.
Cotton, Raw .	cwts.	678,606	521,762	1,061,864	1,281,131	1,155.346
Cotton Goods	pleces	849,961	213,901	114,472	189,340	113,480
Silk, Raw	lbs.	1,108,465	1,728,298	1,569,995	877,364	577.52
Silk, Manufactured .	pieces	556,591	787,928	709,252	407,497	181,25
Indigo	cwts.	62,000	87.910	60,949	55,405	55.62
Shellac	cwts.	25,256	29,412	20,244	20,822	17,94
Sugar	cwts.	498,730	1,340,659	1,382,906	742,020	775,89
Pepper	lbs.		9.042.944	6,800,361	2,046,887	4,987,64
Saltpetre	cwts.	183,603	307,703	267,680	184,068	820,14
Rice, not in the husk .	cwts.	820,752	514,485	688,692	2,151,175	8,571,60
Cocoa-nut Oil .	CWts.	_			125,335	77.87
Hides	No.	52,559	116.654	101.193	133,717	179,54
Skins, Gest and Sheep .	No.		94,163	90,799	618,947	1,500,89
Ivory	cwta.	2,312	3,974	3,467	2,599	5,09
Teak	loads		8,756	10.066	15,712	87,88

VALUE of IMPORTS (including TREASURE) at the PRINCIPAL PORTS in EACH PRESIDENCY, by SEA, in each of the years ended 30th of April, 1855, 1856, and 1857.

Ports.			1855.	1856.	1857.
BENGAL					
Calcutta -		-	£6,965,592	£13,190,894	£18,959,784
Arracan -	-	-	54,428	80.667	41.614
Chittagong -	-	- 1	4,293	2,837	4.814
Tenasserim Province	:08	-	220,148	124,652	165,136
Balasore -	-	-	218		887
Total	-	-	7,244,678	18,338,550	14,172,485
MADRAS					
Fort St. George	-	-	1,014,050	1,948,956	2,059,430
Ganjam -	-	-	6,255	1,815	1.383
Vizagapatam -	-	- 1	1,237	2,150	936
Rajamundry	•	-	1,775	1,822	4.376
South Arcot -	-	-	8,911	7,852	13,504
Tanjore -	-	-	77,482	92.949	172,017
Madura -	-	-	13,315	12,596	11.825
Tinne velly	-	-	40,003	9,706	62,446
Malabar -	-	-	59,723	72,149	177.334
Canara -	-	- 1	59,445	51,878	87,984
Masulipatam -	•	-			4
. Total	-	-	1,281,556	2,201,873	2,540,739
BOMBAY				1	
Bombay -	-	•	6,150,838	9,549,912	11,732,745
Gogo -	-	-	200	93	380
Kurrachee -	-	-	80,898	152,980	161,800
Malwan -	-	-	34	I -	1 -
Surat -	-	-	12,066	824	16
Tarrapoor	-	-	94	132	-
Viziadroog -	-	-	624	441	169
Total	-	-	6,944,763	9,704,359	11,895,060

TOTAL VALUE OF IMPORTS AND EXPORTS, INCLUDING TREASURE, OF BRITISH INDIA, BY SEA.

	Ye	ars.	DAILISA	Imports.	Exports.
1841 1842 1848		•	•	£10,202,193 9,629,901	\$13,822,070 14,842,294
		•	•	11,046,894	18,767,621
Т	otal	•		80,878,988	41,931,985
A	Verag			10,292,996	18,977,398

IND		IND		
1851 1852 1858	Total	impo •	orts and exports, £24,270,834. £13,570,598 17,292,549 16,902,240	£18,705,439 20,798,342 21,519,863
Total	•	•	49,565,887	61,028,644
Average			16,521,796	20,341,215

Total imports and exports, £36,863,011.
Per centage increase in ten years, 51.12.

VALUE of the TOTAL EXPORTS from EACH PRESIDENCY, by SEA, distinguishing MERCHARDISE and TREASURE, in each of the years ended 30th of April, 1855, 1856, and 1857.

		BENGAL		Madras.			
Years.	Merchan dise.	Treasure.	Total	Merchandise.	Treasure.	Total	
1855	£10,655,850	£391,506	£11,047,416	£1,546,848	£521,814	£2,068,662	
1856 1857	12,936,800 12,914,542	112,586 529,425	13,049,385 13,433,967	1,964,500 2,329,429	70,730 78,477	2,035,230 2,407,906	
		BOMBAY.			TOTAL.		
1855	6,724,594	853,658	7,078,177	18,927,222	1,267,033	20,194,255	
1856 1857	8,136,959 10,094,480	417,910 645,524	8,554,869 10,740,004	23,038,259 25,838,451	601,178 1,253,426	23,639,435 26,591,877	

VALUE of the TOTAL EXPORTS by SEA (including TREASURE) from the PRINCIPAL PORTS of EACH PRESIDENCY, in each of the years ended 30th of April, 1855, 1856, and 1857.

Ports.			1855.	1856,	1857.
Bengal.					
Calcutta		-	£10,266,838	£11,765,831	£12,830,768
Chittagong -	-	-	21,276	16,287	27,941
Balasore -		-	45	298	291
Arracan -	-	- 1	568,082	1,072,642	809,094
Tenasserim Provinces		-	196,176	192,278	275,673
Total	-	-	11,047,416	13,049,836	18,443,967
MADRAS.	_				
Fort St. George (Madr	M)	-	1,048,609	874,276	1,106,288
Ganjam		-	47,388	119,128	89,837
Vizagapatam	-	-	55,017	136,435	151,868
Rajahmundry -		-	98,972	127,702	96,198
South Arcot	-	-	58,605	74,067	85,441
Tanjore		-	252,929	312,327	814,951
Madura -	-	-	56,027	40,558	84,725
Tinnevelly -		-	195,232	97,811	276,606
Malabar -	-	-	188,814	183,540	126,400
Canara		-	127,069	116,871	110,239
Masulipatam	-	-			13,258
Total -		-	2,068,662	2,035,230	2,407,906
BOMBAY.					·
Bombay -		-	7,047,432	8,519,780	10,706,851
Gogo -	-	-	283		
Kurrachee -		-	22,412	25,530	27,988
Burat -	-	-	5,387	7,289	2,744
Trombay		-	1,568	176	l "iā
Viziadroog -	-	-	1,095	2,094	703
Total -		-	7,078,177	8,554,869	10,740,004

Produce and Manufactures of the United Kingdom Exported to India 1840-1858.

Years.	Cotton Manufactures	Cotton	yarn.		and Wor- Stuffs.	Woolen Kanufactures (exclusive of Stuffs). All other Articles		Aggregate of British Produce and Manufac- tures Exported to India.
	Declar'd Value.	Quan- tity.	Declar'd Value.	Quan- tity.	Declar'd Value.	Declar'd Value.	Declar'd Value.	Declar'd Value.
	<u>R</u>	Lbs	<u>£.</u>	Pieces.	£.	£.	<u> </u>	£.
1840	8,025,656	16,013,708	847,530		122,784	168,254	1,858,968	6,023,192
1841	2,766,630	13,144,648			108,377	162,710	1,896,301	5,595,000
1842	2,515,397	12,050,839	545,075	34,924	79,926	130,577	1,898,918	5,169,888
1843	3,230,576		706,833		205,364	172,930	2,088,811	6,404,519
1844	8,768,962	22,084,132	1,024,230	96,120	194,620	244,022	2,463,832	7,695,666
1845	3,371,207	16,823,846	839,216	41,086	86,452	230,028	2,176,875	6,703,778
1846	3,254,141	24,193,923			67,177	170,769	1,854,625	6,434,456
1847	2,434,082	15,688,997			50,094	192,881	2,048,595	5,470,105
1848		17,991,526	693,108	28,972	64,947	153,091	1,821,287	5,077,146
1849	3,501,891	22,193,700			78,785	158,030	2,200,621	6,803,274
1850	4,180,386	20,965,471	1,039,508	27,157	41,768	282,857	2,477,846	8,022,665
1851	4,415,182	25,734,668	1,213,449	30,840	43,294	272,608	1,862,063	7,806 596
1852	4,288,374	24,802,091	1,070,068	26,944	41,449	199,521	1,753,495	7,352,907
1853	4,511,805	25,472,070	1,168,264	38,065	68,445	226,954	2,210,227	8,185,695
1854	5,921,449	26,531,939	1,230,766	80,279	55,558	327,646	2,490,550	10,025,969
1855	5,174,155	28,944,460	1,283,931	20,965	81,794	277,856	4,160,328	10,927,694
1856	5,509,050	25,244,016	1,175,785	45,765	82,297	238,218 437,772	4,802,089	11,807,439
1857 1858	5,786,471 9,389,429	29,027,859 36,782,533	1,147,379 1,969,227	50,271 78,114	84,168 121.385	489,789	5,623,863 6,314,022	13,079,653 18,283,852

(Parl. Return, No. 38, Sess. 2, 1859.)
The total Declared Value of the Exports for some of these years differ from those in the Annual Statements of the Trade and Navigation of the United Kingdom.

		Export	from India	to China.	ne of ures luce from hins.	Manufactures and Produce Imported into India from China.	
Years.	Years. Opium.		Cot	ton.	All other Articles of Manufac-		
	Quantity.	Value.			Produce.	Zotal Manu and Expor	
	Chesta.	€.	Lbs.	£.	£.	£.	£.
1836-87	31,375	8,934,459		1,287.984	219,619	5,442,062	525,544
1837-38	26,484	2,904,284		1,025,947	164,994	4,095,225	440.066
1838-39	31,852	2,791,132		1,253,555	210,455	4,255,142	461,005
1839-40	3,948	191,422		696,803	116,314	1,004,539	201,188
1840-41	17,839	1,267,887		707,839	200,933	2,176,659	629,272
1841-42	25,695	1,839,401		822,013	215,380	2,883,794	566,805
1842-43	80,108	2,820,352	•••	1,377,630	199,960	4,397,492	572,362
1843-44	32,341	4,229,542	***	1,279,164	216,080	5,724,786	638,985
1844-45	29,594	4,133,591		1,181,459	237,031	5,552,081	804,316
1845-46	40,965	5,541,785	•••	820,620	146,841	6,508,696	733,514
1846-47	38,057	4,271,320	::	863,504	97,158	5,231.982	666,892
1847-48	84,349	8,507,804	62,196,060	626,120	108,920	4,241,844	1,014,595
1848-49	49,262	5,345,719	96,119,905	1,013,512	167,059	6,526,290	831,361
1649-50	47,509	5,543,588	52,445,222	741,504	116,754	6,401,846	809,801
1850-51	48,030	5,074,078	77,050,629	1,160,364	118,098	6,352,585	989,369
1851-52	58,069	6,082,307	160,717,651	2,291,926	148,784	8,523,017	924,159
1852-53	56,412	6,470,916	75,571,742	1,026,444	122,959	7,620,319	866,943
1853-54	60,054	5,802,469	55,777,008	808,570	93,695	6,704,734	810,337
1854-55	69,910	5,684,978	45,893,923	689,143	191,013	6,445,134	915,049
1855-56	63,427	5,592,532	56,691,112	810,628	189,793	6,592,953	787,717
1856-57	66,305	6,505,586	48,784,561	715,852	847,546	7,568,984	599,672
1857-58	68,004	8,241,032	20,524,119	893,4 93	782,812	9,366,837	915,858

DECLARED VALUE OF ARTICLES, the PRODUCE OF MANUFACTURE OF the United Kinddom, Exported to British India.

Articles.		1840.	1845.	1850.	1885.	1858.
		£.	£.	£.	£.	£.
Apparel	-	90,744				
Arms, ammunition -	-	108,133	235,654	75,327	21,041	173,007
Beer and ale -		110,747	167,483	126,917	456,319	655,759
Cotton manufactures -	-	3,025,656	3.371.207	3,703,468	4.630.945	8,499,934
Twist and yarn	-	847,530			1,212,029	
Glass manufactures -	-	104,628				
Iron and steel -	-	802,849			1,242,853	
Hardware and cutlery -	-	93,644				
Copper wrought and unwrought	-	373,876				
Machinery and engines	-	66,087				
Linen manufactures -	_	63,750				
Woollen manufactures -	_	291,086				
Other articles -	Ξ	\$50,042				1,478,044
Orner er ercion .	-		0,7,000	100,301	300,110	7/2/0/02
		1				
Total	-	6,023,192	6,703,778	7,242,194	9,919,154	16,78 2,38 6

In the total exports and imports, including treasure, the three Presidencies share in the following manner:—

VALUE.—1853. IMPORTS.

Calcutta Madras Bombay	:	Merchandise. £ 1,998,675 640,582 4,236,656	Treasure. \$3,393,987 576.654 2,860,586	Total. £8,367,662 1,417,386 7,307,192
Total		10,070,863	6,831,877	16,902,240
		EXPO	RTS.	
Calcutta		Merchandise. £10,738,555	Treasure. £476,375	Total. £11,214,990

Madras 2,121,614 36,382 2,157,996
Bombay 7,604,464 642,473 8,146,937

Total 20,464,638 1,055,230 21,519,863

The vegetable and animal products of India form at present the principal

sources of the industrial pursuits of the inhabitants, and of the wealth of India. The cultivation of silk receives a good deal of attention from the natives, but the best qualities are the produce of European establishments. The silk is classed into two bunds—namely, the rainy and the dry weather bunds; the name being derived from the season in which it is obtained. The inferior qualities of silk are generally used by local manufacturers; the better qualities are almost wholly shipped to Europe. This most valuable product is capable of great extension and improvement. If its production were more carefully attended to, it might rival the finest silks of Italy. There is no doubt that, with continued attention, the Punjaub will soon rival Bengal in the production of this important staple. The raw silks from Burmah, and some from Assam, are of a peculiar coarseness, yet the length and strength of the thread are such as to render this silk peculiarly adapted for the manufacturing of fringes. Experiments made in France with this silk will no doubt lead in a short time to the exportation of large quantities to Europe. Bengal exported in the year 1851-52 raw silk to the amount of 16,212 maunds, valued at 6,802,806 rupees, and in 1856-7, 1,756,778 lbs.

Saltpetre is manufactured chiefly by natives. It constitutes a very important part of the export trade of India, being shipped to Europe and to the United States in large quantities. The quantity exported is about 700,600 maunds annually, value between forty and fifty millions of rupees. Taking the maund at 84 lbs. 4 oz., this gives about 59,000,000 of lbs. of saltpetre, Jute has of late

become one of the most important articles of export. Ten years ago the quantity exported was very trifling. Since that time the consumptive demand, both in Europe and America, has increased so rapidly that the quantity now exported is enormous. In the year ending May, 1851, the quantity exported was 793,299 maunds, valued at 1,970,715 rupees. The export has since nearly doubled, in 1857, 673,416 cwts. were shipped, and there is every probability that the

quantity produced will annually increase. See JUTE.

Shell lac and lac dye, the production of which is annually on the increase, are important articles of export. The forests of Assam—indeed, of most parts of India—furnish an almost unlimited quantity of the insect known as Coccus lacca, from which lac dye and shell lac are prepared. Stick lac is the lac insect with its resinous covering on the branches of the trees on which it was produced; seed lac is the insect and resin separated from the wood; lac dye is the colouring matter of the insect; shell lac is the resin separated by melting and straining. In the year ending May, 1851, the quantity of shell lac exported from Bengal was 48,922 maunds, valued at 421,936 rupees; of lac dye, 46,289 maunds, valued at 925,396 rupees. In 1857, 49,475 cwts. were shipped of the value of £105,575. Of seeds cultivated for their oil, Bengal furnishes a great variety, several of

which are exported in considerable quantities to Europe and America. The principal seeds grown for oil are flax, rape, mustard, and castor oil beans. Oil seeds exported in the year ending May, 1855, amounted to 271,449 maunds. Recently very large exports have been made to England of linsed, the high price in England stimulating the trade. The quantity of castor oil exported averages about 71,071 maunds, valued at 710,709 rupees. 2,142,408 cwts. or oil seeds were shipped from India in the year ending 80th April, 1857, valued at

£1,118,654.

Cotton is generally cultivated all over India. The local consumption is very great; it has been estimated as high as 20 lbs. annually for each individual, while other estimates reduce the quantity to 5 lbs. per head. In forming an estimate of the local demand, it is necessary to bear in mind that cotton takes the place of hemp, flax, hair, and wool, for all the purposes to which these are applied in Europe. The production of cotton is, therefore, very great. Taking the population at 162 millions, this gives, at 20 lbs. per head, 3240 million lbs., and at 5 lbs. 810 million lbs. A portion is also exported, cotton being one of the staple articles of export to China and Great Britain.

The exports of cotton from Bengal in the year ending May, 1851, were 281,230 maunds, valued at 2,812,629 rupees. The great proportion from that Presidency goes to China. In the year ending 1854—

-	_	To England.	Other Parts.
Bengal exported .		2,065,056	12,031,152
Madras exported	: :	8,721,984	8,485,032
Rombay avnorted		197 306 389	44 062 152

Forming an export to Great Britain and elsewhere, from India, of 195,278,720 lbs. of cotton—equal to nearly 2,325,000 maunds.

Rice may be said to occupy the greatest breadth of any one of the cultivated plants in the south of India. Notwithstanding local consumption by nearly every inhabitant of the lower parts of the country, the quantities exported are very considerable. There is a common error in reference to the place rice occuvery considerable. There is a common error in reterence to the place rice occupies in the food of the native population of India. This error has led to others. There can be no greater mistake than to suppose that the population subsist mainly on rice. More properly speaking, the principal article of food is wheat and millet, especially in Upper India, where rice is only partaken of as a luxury. "A rice-eating coward" is a term of reproach in India. In the lower parts of Bengal, and, consequently, more under the eye of Europeans, the principal of the principal o cipal food is rice; but in the more remote parts, and particularly in some parts of Upper India, wheaten bread is the staple food of the people, and the breadth under wheat exceeds that of any other crop. Even in those districts where rice forms the principal article of diet, oil, milk, ghee, and the seeds of the leguminous plants, supply those elements of nutrition in which rice is mainly deficient.

India supplies rice for the Mauritius, Bourbon, and other European colonies in the Indian Ocean, where the native population subsist mainly upon rice. Large quantities are also shipped to Europe; England and France taking the greater part. The shipment is confined to the principal qualities, although India produces not less than 150 different kinds of rice. In the year ending May, 1851, Bengal exported—

			_				Maunds.
Rice .			•	• .			8,597,859
Wheat .					٠.		222,208
Grain .	,						71,326
Dholl and Pea					•		78,530
Oats .	,						14,610
Paddy .							1,145
Flour				•			5,611

Valued at 4,408,392 rupees.

8,991,292

Wheat, barley, oats, flax, sesamum, poppy, and all the pulses, are winter crops gathered in spring. Rice is sometimes taken twice in Southern India—first sown in May, reaped in the month of July, the land re-sown in August and reaped in November. In Northern India, rice and millet are sown in May or June, and reaped in August or September.

Of the countries which trade with India, after our own, China is pre-eminent. The total value of the trade, import and export, between India and China, inclusive of bullion, was as follows:—

	Value of Imports.	Value of Exports.	•	Value of Imports.	Value of Exports.
1848	£2,050,937	£2,595,444	1853	£3,297,751	£4,348,857
1849	3,940,363	6,283,614	1854	1,402,101	1,424,778
1850	3,184,71 7	3,866,108	1855	1,287,678	6,633,959
1851	2,836,653	8,746,604	1856	2,528,066	6,663,004
1852	8,231,952	4.582,172	1857	2,071,894	8,016,684

The trade of no other country with India approximates to that of China. Next in value as to imports is "Arabia and the Persian Gulf." Between 1848 and 1857 the value varied from £912,996 to £1,096,202. And then follows "Singapore and the Malacca Straits," the value of the imports from which varied in the same period between £875,644 and £915,725. For exports, Singapore stands second to Arabia and the Persian Gulf. The value of the domestic produce of India exported thither ranged between 1848 and 1857 from £45,366 to £985,128, while the value of the exports to Arabia varied between £260,139 and £1,072,098.

VALUE OF THE TRADE BETWEEN BRITISH INDIA AND AUSTRALIA.

Years.	Imports.	Exports.	Years.	Imports.	Exports.
1848	€8,475	£4,312	1858	£294.917	£106.450
1849	12,512	8,582	1854	891,344	216,837
1850	63,938	11,881	1855	202,391	188,084
1851	114,183	18,485	1856	882,186	143,193
1852	178,787	89 109	1857	536 974	184,096

The increased prosperity of the colonies shows itself in the trade to India as well as in the trade to England.

TRADE OF THE PRINCIPAL PORTS-CALCUTTA.

It is scarcely necessary to give a detailed account of the trade of every subsequent year since 1841 for Calcutta. The value of the merchandise imported there in 1852-53 was 486,90,452 rupees, and in 1853-54 5,58,98,251 rupees. These figures may be readily turned into pounds sterling by striking off the last figure. The ships and tonnage which entered the river with these imports were 618 vessels and 305,409 tons. The gross amount of exports,

excluding specie, was in 1852-53 Rs. 11,18,36,891, and in 1853-54 only Rs. 10,67,70,907, a decrease of Rs. 50,65,000. Of this amount, however, thirty-two lakhs arose from the diminished price of opium. During 1853-54, the increased production did not pay. The 36,178 chests offered for sale in the previous year were purchased for Rs. 4,02,00,944, while the 40,787 chests of 1853-54 fetched only Rs. 3,69,02,087, The export of indigo increased by seventeen lakhs, of saltpetre by 64 lakhs, of rice by fourteen, of silk by 134, of hides by Rs. 3,86,192, and of jute by Rs. 4,27,805. The export of all the remaining staples of Bengal declined, that of cotton having fallen by Rs. 20,77,380, sugar by seventy lakhs of rupees, gunny cloth by 6 lakhs, and linseed by nearly five.

The subsequent annual reports of the trade of Calcutta display the growing importance of its trade. The total movement for 1855-56 shows an increase of more than £8,000,000 sterling.

1854-55 1855-56	•••	•••	Ra.	Imports. 7,27,30,898 13,87,08.627	Exports. 11,92,64,707 13,75,20,997	Total. 19,19,95,605 27,62,29,624
Incres				6 59 77 799	1 82 56 240	8 49 34 019

Of this amount £5,810,000 consisted of specie imported within the year. What becomes of this vast mass of bullion it would be difficult to say. It is quite clear that a fifth of it is not exported by sea. It is almost certain that it does not cross the frontier. It must, therefore, remain in the country, but though the process has gone on for years there is no perceptible increase of the circulation. Many officials, to whom this mass of bullion is as great a puzzle as it seems to be to the economist, believe that the bulk of the money is turned into ornaments by the artisans and shopkeepers. That class which in India is wholly untaxed accumulates money rapidly, and this is its only idea of permanent investment. The quantity of ornaments possessed by families of weavers, oil dealers, braziers, and goldsmiths, is sometimes astonishing. For instance, in a case tried in an interior court, it appeared that the plaintiff, a common workman, had borrowed £50 on the security of his wife's jewels. That is exactly as if a Spitalfields weaver possessed watches and rings to the value of three years' wages.

The value of bullion received into the Calcutta Mint during the last five years was as follows:—

		Gold.		Silver.
1853-4	-	£101,190	•••	£1.436.617
1854-5	•••	10,885	•••	127,862
1855 -6	•••	203,205	•••	4,536,814
1856-7	***	118,066	••	5,478,257
1857.8		40 CK7		6 084 060

The great increase in exports in 1855-56 was in the following articles:-

			Increase. Rupees.			Increase, Rupees,
Indigo	•••	•••	55, 44,000	Gunny bags and cloth	•••	10,21,000
Rice	•••	***	47,00,000	Jute	•••	9,97,000
Silk	***	•••	15,81,000	Mustard seed	•••	16,84,000
Silk niece goods		***	9.06.000			

The trade in the last named article has sprung up almost entirely within a year, and has reached a total exceeding 32,660 tons. The increase in imports, specie excluded, was chiefly in machinery (£750,000) and piece goods (£170,000). The former fact proves nothing, as the machines are chiefly locomotives, but the latter indicates the increasing comfort of the people.

The tables on the next page give the latest returns of the trade of Bengal.

STATEMENT of some of the LEADING ARTICLES of EXPORT from CALCUTTA during the years ending July, 1856 and 1857.

			Great	Britain.	Fre	nce.	North A	merica.
Prod	luce.		12 months ending slet July, 1867.	13 months ending 81st July, 1856.	is months ending sist July, 1857.	19 months ending 81st July, 1856.	12 months ending slat July, 1857.	13 months ending 81st July, 1886.
Sugar - Rum - Saltpetre	:	Tons Gals. Tons	28,800 294,800 11,300	890,970 12,800	117,653 8,790	74,610 4,827	None 10,777	None 13,126
Raw silk Corahs - Cotton Rice -	:	Lb. Pieces Tons	724,800 130,580 10,580 29,000	517,380 10,380	None	None None	None None	5,640 None
Hides - Safflower Jute -	:	Pieces Tons	2,643,148 647 17,300	1,617,520 927 25,450	354,070 16 3,590	61,294 71 2.671	490,585 20 7,753	362,391 17 4,060
Linseed Mustard seed Cutch - Lac dye	:	91 91 91	10,870 82,660 820 616	7,650 91 468	None 923	130 362 11	None 442 None	None 229 76
Indigo	-	Chests	14,600	20,500	7,055	9,043	1,963	2,515

VALUE of the PRINCIPAL ARTICLES of MERCHANDISE (domestic and foreign), and of TREASUEE, exported from the Presidency of Bengal by Sea, distinguishing the Value Thereof, to the United Kingdom in each of the years ended 30th of April, 1855, 1856, and 1857.

Principal Articles.	Tot	Total Exports.			To United Kingdom.		
	1856.	1856.	1857.	1855.	1856,	1857.	
Coffee Cotton, Raw	£7,077 92,872	8,881 158,115	9,058 209,834	3,35 0 729		439 41,744	
Cotton Goods, including Twist	59,898	31.194	52,536			-	
Drugs	51,624	88,906			24,300		
Dyes	1,512,095	2,004,738					
Grain	1,231,153						
Gums	198	1,104			756	987	
Gunnies and Bags	213,614	802,113			8,160	417	
Hides and Skins	855,827	872,248			220,273		
Ivory and Ivory Ware -	695	970		613			
Jewellery and Precious Stones	14,416	8,580					
Jute	229,241	328,798					
Lac and Lacquered Ware -	92,130	126,411		63,089			
Oils	29,225				24,509	80,451	
Oplum		8,638,949					
Saltpetre	457,714						
Sceds Shawls	644,089 40,424						
Silk, Raw -	460,309					562.094	
Goods -	948,577						
Spices	5.857						
Sugar and Sugar Candy -	820,798						
Tes -	15,815						
Timber and Woods -	115,577						
Wool, Raw	85	-	1				
			l ———				
Principal and other Articles							
of Merchandise : —	l			I	l		
	10,545,772						
Foreign ,, -	110,078	126,287	127,839	63,604	63,833	54,109	
Total -	10.655,850	12,936,800	19 914 549	4,395,061	5.904.839	4,902,036	
Treasure	391,566		529,425		-	4,530	
Total Merchandise and Treasure	11,047,416	13,049,336	18,443,967	4,434,466	5,904,839	4,906,566	

The subsequent supplies of rum, sugar, saltpetre, cotton, linseed, indigo, and shellse from disaffected districts were much affected by the mutiny. The import trade from Great Britain to Bengal was, however, but little affected, and the trade returns for the years ending January 1857 and 1858 were about the same.

In exports from Calcutta, on the contrary, there was a great reduction. Thus the shipments in the twelve months were:—

		Year	ending	31st Jan. 1857.	Year en	ding 31st Jan. 1858.
Saltpetre, maun	de .	•••		806,867	••	299,231
Sugar, mds.	***	•••	***	1,103,950	•••	291,77 9
	•••		•••	296,108	••	122,280
	•••	***	•••	304,619	***	261,750
Cotton to China		•••	••	205,936	•••	11,323
Mustard seed, m	ids.	***	•••		••	589,803
Borax	•••	***	•••	80,098	***	10,123

In other words the reduction in sugar was eighty per cent., in corahs more than fifty per cent., in cotton more than forty-five per cent., in mustard seed forty per cent., and in borax more than two-thirds. The produce of the North-West declined more than a clear half, and the peasantry had to pay a fine equal to half the profit of a year's trade for their own insensate apathy. Other articles in which Bengal could supply the deficiencies created by the mutinies rose rapidly. Thus during the same periods there were shipped—

		1857.		1858.
Rice, maunds	•••	875,457	_	1,698,981
—— to Mauritius	•••	991,080	••	990,899
Shell lac, mds.	***	22,644	•••	35,822
Lac dye	***	15,857	•••	16,983
Hides, pieces	•••	785,159	•••	2,661,295
Hemp, mds.	***	42,489	•••	61,661
Linseed	***	258,564	***	760,528
Ginger	***	8,845	•••	13,205
Cntch	•••	1.037		11,515

This statement shews clearly that the reduction was due to the mutinies, and not to any cause generally affecting Indian trade.

The nominal returns for subsequent years exhibit a slow but progressive increase. Value in rupees of

Year.	Importa.	Exports.	Total.
1855-56	12,87,08,627	13.75.20.947	27.62,29,574
1856-57	14,70,02,315	14,66,37,449	29.36.39.764
1857-56	15,21,45,131	14.24.07.413	29, 45, 52, 544
1858_50	15.46.49.788	15 95 67 555	80 79 17 391

showing an increase in the total movement of trade of about a million and a quarter. The trade of Calcutta and Bombay are now as nearly as possible equal, and the entire trade of India, with Rangoon, but without Singapore and Ceylon, exceeds seventy millions. In the last year of the Company's monopoly it was not five.

The figures quoted by no means however represent the true position of the Bengal trade. While the exports have increased from Rs. 13,38,10,495 in 1857-58 and Rs. 11,92,74,707 in 1855-56 to Rs. 14,62,98,753 in 1858-9, the imports have increased as follows:—

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1855-56 - - Ra. 8,06,06,182 | 1857-58 - - Rs. 7,40,74,244 | 1856-57 - - 8,02,41,782 | 1856-59 - - 10,37,78,306
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an increase of twenty-two per cent. within four years. The addition is almost entirely in the imports from Great Britain, which have risen from Rs. 5,23,84,514 in 1854-55, to rapees 8,25,53,754 in 1858-59. The most important items of increase are

Cotton -	•	Rs.		White	and g	rey cottons	Ra.	
Haberdashery	-		8,18,318	Ale	•		-	15,00,821
Hardware -	-			Twist	-	-	-	81,20,698
Copper -	-		6,51,599	•				

showing a new trade of two millions sterling with Manchester alone.

In exports the greatest fluctuations were in

				Increase.				Increase.
Silks	-	-	Rs.	10,26,928		•	Rs.	21,49,089
Opium	-	-		42,85,474	Linseed -	-		20,81,914
Snour	_	-		38.63.928	Mustard seed	-		14.84.683

The only article in which any decrease of importance occurred was rice, of which there was exported less by half a million sterling than in the previous year. The import of treasure was—

1854-55	-	-	Ra. 64,08,606	Brought over	Ra. 13,12,69,584
1855-56	-	-	5,81,00,445	1857-58	7,80,70,887
1856-57	-	•	6,67,60,583	1858-59	5,08,71,461
Carrie	OVER	_	12.19.69.884	Total -	96.93.11.933

BOMBAY.

Taking the returns of 1853-54, we find by comparison that there was an increase on the average of the previous five years of 18 lakhs of rupees, or nearly a million sterling in the exports from Bombay. The trade of the island has since also increased with marvellous rapidity, having doubled in the last five years:—

Years.			Imports.		Exports.
1853-54		Rs.	8,43,8 3,626	Rs.	
1854-55	***		7,82,52,261		8,16,98,816
1855-56	•••		11,57,73,041		10,29,10,161
1857 -58	***		14,48,46,391		12,57,93,939
1858-59	•••		16,31,60,036		14,67,53,599
			58,64,15,855		55,22,37,408
Five years' aver	age value		11.72.83.071		11,04,47,481
Value for 1858-	59		18,38,15,410		15,95,06,825
Increase in 1859	L59	Ra	6 65 32 339		4.90.61.344

This immense increase has occurred chiefly in the trade with Great Britain and China. The home trade has increased between 1855 and 1859 as follows:—

	Imports.	Exports.	Total.
1854-55	Rs. 8,42,72,657	2,39,54,125	5,82,26,782
1858_59	6.54.81.594	4 84 65 442	11 20 47 OSS

The trade having almost exactly doubled. The increase in imports has been chiefly in piece goods (the demand for which in 1858-59 rose by £1,600,000), in metals, raw silk, sugar and wines. In exports the rise in the last year was steady, an increase of thirty-three lakhs in seeds being the only remarkable item. The whole of this trade it must not be forgotten has grown up since 1813. In that year, when the Court of Directors declared their monopoly the only real protection for trade, the commerce of Bombay amounted to precisely forty lakhs, or one-fiftieth the present traffic. The increase has not yet reached its limit. There is a boundless demand for wheat, seeds, and cotton, and Bombay exported 219,700,000 lbs. of cotton last year to Great Britain alone.

The trade with China is of course too dependent on opium to be healthy, but even to China the export of cotton doubled in 1859, reaching the value of Rs. 78,00,000.

Oil-seeds form a valuable article of export. In 1857 the value of this staple alone was thirty-six lakhs, showing an increase of twelve lakhs over the shipments of 1856. The value of the exports to Great Britain in 1857 was Rs. 3,13,36,005. The opium trade increased half a million in the course of that year. The returns for 1857-58 place the value of the export of this drug at Rs. 1,61,62,265. The total value of the imports during the year was Rs. 16,91,60,036. In 1856-57 it was Rs. 14,38,46,391. The total value of the exports was Rs. 14,57,53,599, showing an increase of Rs. 2,09,59,660 over the return of 1856-57.

The year 1857-58 which was so injurious to the trade of Bengal was exceedingly favourable to that of Bombay. So rapid indeed has been the increase of

IND	171	IND
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trade in Western India as to repair the deficit of the Eastern Presidency, and bring up the trade of the Indian continent beyond the level of the previous year.

Exports Imports	rts ·	1856-57. Rs. 8,68,07,850 14,48,46,391	Ra.	1857-58. 12,51,06,998 16,31,60,036
Total		23.16.54.241		28.82.67.029

The trade therefore appears to be, within a fraction, a million sterling more than that of Calcutta. The result is, however, only apparent. Of the increase at Bombay one million is due to opium, of which drug India exported during the year to the value of about eight millions sterling. There is, moreover, an item of silver export to the extent of two millions, chiefly to Calcutta and the Punjab. The trade of the two Presidencies excluding opium and treasure, stands as follows:—

Exports	***	Ra. 7,97,35,055	Rs. 5,86,39,734
Imports		7,40,74,244	8,81,74,063
Total	•••	15,38,09,299	14,68,13,797

Calcutta, therefore, maintains her supremacy, in actual trade, but only by a small amount. The difference in the value of the two ports to the home trade is, however, more marked. While Bombay exported Rs. 4,11,69,344 to Great Britain, and imported from thence Rs. 4,13,50,000, Calcutta exported only Rs. 3,89,71,601, but imported Rs. 6,69,34,474. It must be remembered, again, that while Calcutta monopolizes nearly the entire sea-borne trade of Bengal, Bombay possesses some twenty-five ports, several of which possess a small foreign trade of their own. Altogether, it would appear that Bombay has almost caught Calcutta in the commercial race, a curious result when the difference in the wealth and population of the Presidencies is considered.

The total trade of India is shown by these statements to be enormous, the value being for

		Exports.	Imports.
Bengal	***	Rs. 12,71,95,089	Rs. 15,21,45,131
Bombay	•••	12,51,06,993	16,31,60,036

Or with Pegu a trade for all India exclusive of the Straits Settlements, of more than 66 millions sterling, one-third of the entire trade of Great Britain in 1844.

The cotton trade of Bombay is rising rapidly, and now forms nearly half the total exports. The following was the value in the years named.

1853-54	• .	Rs. 2,47,76,102 1856-55 2,17,48,900 1857-56	7 -	Rs. 3,92,08,743
1854-55	•	2,17,48,900 1857-56	8 =	4,08,77,704
1855-56	-	3.07.40.899		

There is cotton enough in India to keep all the mills in Lancashire at work. I have stated in foregoing pages that more than a hundred and sixty millions of people are chiefly clothed with home grown cotton, but the price realized must rise before it can compete successfully with the slave labour of the West.

The table at the top of the next page gives the-

VALUE of the PRINCIPAL ARTICLES of MERCHANDISE (domestic and foreign), and of TREASURE, exported from the Presidency of Bombay by Sea, distinguishing the VALUE THEREOF, to the UNITED KINGDOM in each of the years ended 30th April, 1855, 1856 and 1857:—

Principal Articles.	1	Total Exports. To United Kings		gdom.		
I finespet As ticles.	1855.	1856.	1857.	1855.	1856.	1857.
Coffee Cotton, Raw	£41,116 2,166,402					51,352 3,109,376
Cotton Goods, including Twist		<u> </u>				
and Yarn	581,055					
Drugs	24,241					
Dyes	77,489					
Grain	72,723					
Gums	43,021		25,827	87,960	27,913	21,565
Gunnies and Bags	840		ا			
Hides and Skins	11,474			8,698		
Ivory and Ivory Ware	65,867					
Jewellery and Precious Stones	20,303		111,858			
Lac and Lacquered Ware -	157					369
	41,487				41,691	49,247
Opium	2,536,461					
Saltpetre	17,487					
Seeds	121,446					
Shawle	157,566			134,567		
Silk, Raw	39,796					
0-7	18,242					20
A	71,449		62,300	30,513 452		
Sugar and Sugarcaudy -	158,678					5,364
Timber and Woods	24,640				1,589	13,917
Wool, Raw	6,715					
11 001, MAW	205,546	272,102	814,096	205,135	270,647	306,796
Principal and other Articles of Morchandise:—						
Domestic Produce -	6,031,691			1,761,776	2,247,161	2,775,151
Foreign ,, -	1,692,834	2,472,277	3,177,078	601,704	1,170,133	1,655,484
Total -	6.724.524	8.186.959	10,094,480	2,363,480	3.417.994	4 420 625
Treasure	852,658	417,910	615,524	81,944		
Total Merchandise and Treasure	7,078,177	8,554,869	10,740,004	2,895,494	3,417,294	4, 420,635

MADRAS.

The value of the total exports of the Madras Presidency, for the four years 1852-1856 inclusive, was Rs. 14,32,93,799, and that of the imports Rs. 11,35,20,461; a few of the principal articles being as follows:—

	F	EPORTS.		I IMPORTS.	
Cotton we Cotton goo Indigo Rices Sugar Coffee Hides Treasure	ol		Value Rs. 1,80,91,229 1,17,30,424 1,35,86,681 2,11,24,530 1,05,88,376 27,69,086 24,71,379 2,73,46,975	Cotton goods, twist and y. Horses Grain Military stores Railway materials Timber and planks Malt liquors Treasure	Value Rg 33, 16, 210 64,80,792 27,32,569 24,66,255 18,49,555 16,26,009 4,21,37,054
2	-	Rupees	10,77,18,090	Rurees	7,89,53,737

	IMP	ORTS.	Exports.		
Years.	Madras Harbour.	Presidency Generally.	Madras Harbour.	Presidency Generally.	
1869-63 1853-04 1854-55 1855-56	Rs. 1,91,96,753 1,55,15,861 1,61,64,640 2,41,49,293	Rs. 2,36,50,844 2,74,12,628 2,56,06,917 3,68,50,572	Rs. 1,26,37,612 1,93,48,364 1,44,62,938 1,27,60,080	Rs. 8,69,83,429 4,06,72,176 8,20,48,539 8,85,89,655	
	6,80,36,547	11,35,20,461	5,94,08,994	14,82,93,799	

In this period there has been no very sensible increase to the export trade, either from the city or from the whole country, and any increase observable in the imports may be attributable to the large quantities of railway materials lately sent out: but the great staples of its export trade, cotton and cotton goods, indigo, cereal grains and pulse, sugar, coffee and hides have been steady, and the articles imported being more numerous and more varied, and their individual values smaller, any fluctuations in their amounts would be less sensibly felt. It seems to be acknowledged that in many parts of the country, certainly in all where the condition of the people is improving, they are rapidly accumulating the precious metals; and perhaps no part of Asia has been more steadily accumulating bullion than has the delta of the Godavery since Colonel Cotton commenced his improvements there.

The Madras Presidency is steadily absorbing 37,07,519 rupees per annum of the bullion of the world. These commercial tables show that the value of the articles exported exceeds that of the imports, and the difference must of necessity be paid for by bullion. The value of the exports from Madras, exclusive of treasure, has annually averaged rupees 2,89,86,706, while that of the imports has been Rs. 1,78,45,851, and this must be made good by bullion, until the wants of the people so increase as to call for further imports in return for the articles which they produce and send to other countries.

VALUE of the PRINCIPAL ARTICLES of MERCHANDISE (domestic and foreign), and of TERASURE, exported from the PRESIDENCY of MADRAS by Sea, distinguishing the VALUE THEREOF to the UNITED KINGDOM, in each of the years ended 30th April, 1855, 1856, and 1857.

Principal Articles.	To	tal Expor	te.	To U	nited Kir	gdom.
гинары Анасы.	1855,	1856.	1857.	1855.	1856.	1857.
Coffee	£84,611	46,278	50,390	7,717	14,956	
Cotton, Raw	169,490	89,361	316,362	104,491	58,900	261,080
Cotton Goods, including Twist			1 1			1
and Yarn	183,155					
Drugs	8,085		5,791	1,326		
Dyes	227,720	427,271	453,249	209,936	851,795	
Grain	488,654	\$24,503	541,132	21,326		86,265
Gums	229	54	17	128	_	1
Gunnies and Bags	1,881	221	167	-	_	-
Hides and Skins	85,091	47,487	62,418	29,282		
Ivory and Ivory Ware -	359	191	288	879	187	
Jewellery and Precious Stones	12,779	10,640	10,402	10,544	9,288	
Juto -	_	278	- I	_	278	
Oila	60,246	59,908	56,467	46,095	83,424	
Saltpetre	9,620		9,403	8,649	7,211	8,849
Seeds	47,264	186,774	165,470	7.045	14,514	14,945
Shawls	848	742			716	139
Silk, Raw	-	-	8,922	-	_	8,922
Goods	1.684	2,450			243	
Spices	29,335	55,844	23,608	5,070	8,561	6,072
Sugar and Sugarcandy -	156,223		857,564	145,825	279,897	355,118
Tea	49	833	249	27	17	119
Timber and Woods -	6,226			8,220		
Wool, Raw	1,682			1,682		
Principal and other Articles of Merchandise: —					-	
Domestic Produce -	1,514,688	1,940,902	2,307,446	697,979	975,221	1,294,279
Foreign ,, -	82,160				8,143	
Total -	1.546.848	1.964.500	2,329,429	713,520	983.864	1,298,406
Treasure	521,814	70,730	78,477	98,581	42	
Total Merchandise and Treasure	2,068,662	2,085,280	2,407,904	807,051	988,406	1,298,406

INDIGO.—The quantity of indigo imported into the United Kingdom in 1845 was 90,424 cwt.; in 1850, 70,482 cwt.; in 1855, 59,760 cwt.; and in 1859, 63,237 cwt.

The following shows the particulars of the indigo trade in London for the last eight years:—

Years.			East Indi	a, chests.	Spani	ish, seron	4
1852	Imports -	-	83,0	iġ		4317	
	Deliveries for	home use a					
	export	-	84,10			3360	
1858	Imports -	-	24,91	9		8843	
	Deliveries -	-	30,86			8710	
1854	Imports -	-	27,27			1984	
1	Deliveries -	-	27,00	10		1966	
1855	Imports -	-	23,49			2205	
1070	Deliveries -	-	30,25 30,36	28		2703 3652	
1856	Imports - Deliveries -	:	95,78	9		3110	
1857	Imports -	:	24,10			8774	
1001	Deliveries -		24,74			4005	
1858	Imports -	-	22,89			6295	
1000	Deliveries -	-	23,50			5811	
1859 -	Imports -	-	19,44			7452	
3333	Deliveries -	-	24,74			7711	
	T7	T	_				
	EAS	T INDIA	TMDIGO	SOLD.			
	185	9. 1858.	1857.	1856.	1855.	1854.	
	Ches			Chests.	Chesta.	Chests.	
In Februar			5500	5200	6500	7500	
In May Sal			4700	8500	6000	3500	
In July Sel	es . 649		7000	4400	7700	7500	
In October	Sales . 600	0 7000	4000	7800	7500	6000	
To	tal . 18,90	0 18,900	21,200	20,900	27,709	24,500	
16	1858.	1857.	1856.	1855.	1854.	1853.	1852.
Che			Chests.	Chests.	Chests.	Chests.	Chests.
Imported . 19,		24,169	80,888	22,495	27,227	24,919	23,052
Delivered . 24.		24,746	25,782	30,222	27,060	30,883	34,102
Stock, 81st Dec. 13,		19,779	20,356	15,750	23,488	23,324	29,278
	GUATEMA	LA INDIC	ю, іх в	ERONS, E	-	•	•
185		1857.	1856.	1855.	1854.	1853.	1852.
Imported . 745	2 6295	8774	8652	2205	1984	3343	4317
Delivered . 771		4005	8110	2703	1966	3710	2360
Stock, 31st Dec. 98		1588	1819	1277	1780	996	1359

Databe	△ ₩	Terrora	Dime	DATE

		1	1860		Γ	1859.			18	58.			1857.	
Indigo, Bengal, good and fine violet and purple ord. and mid. ditto good and fine copper ord. and mid. Consuming, good and fine consuming, ord. and mid. Oude—good and fine ord. and mid. Madras—good and fine ord. and mid. Spanish, Gustemals—Flores Sobres Cortes Caraccas—Flores Corte	57565 6 4483152642 42	d. 8998 6 98006890968	to	6. d. 8 8 7 7 6 6 6 6 6 6 7 6 6 6 6 8 6 6 6 6 8 7 6 6 6 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	7675 6 5423161 58	6 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	. d. a	17675 6 5428161 53 42	9	9776676685875	d. 89 9 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	d. 0 8 9 9 9 9 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0	to 10 8 9 8 8 8 7 5 5 5 5 9 6 7	d 2996 9 0699829006 89

INSURANCE.—Sums paid for GOVERNMENT DUTY by the several Fire Insurance Offices for the years 1855, 1856, 1857, and 1858. Abstracted from Parliamentary Returns:—

	Founded	1855.	1856	1857.	1858.
LONDON OPPICES.	- Vunuou	1000.	1000	1007.	1000.
Alliance	1824	£43,668	£48,545	£44,906	£46,285
Atlas		37,923	88,733	39,135	40,013
Church of England -	. 1840	4,058	4,132	4,151	4,396
County	1806 1855	59,555	61,010	62,201	63,818
	1000	128 2,732	314 2,844	684 333	395 2,765
	1837	10,606	10.783	12,455	16.954
Globe	1803	86,324	87,853	88,641	89,455
Guardian	_ 1821	51,456	31,982	82,151	82,645
Hand-in-Hand	1696	9,450	9,971	10,190	9,901
Imperial -	_ 1820 _ 1845	47,951	49,440	51,477	54,482
Law Law Union	1845 1854	27,524 2,920	28,929 8,920	29,958 4,864	32,137 6,024
London	1725	28,014	28,228	29,317	30,859
	1782	124,140	126,952	128,747	132,571
Preserver	1843	19	20	27	28
	1720	77,694	77,891	78,601	81,048
	1840 1856	11,414	11,355	11,492	11,735
	1710	190,257	240 193,951	195,668	2 655 198,613
Union -	1714	26,455	27,030	27,832	29,096
United Kingdom Provident -		226			824
Unity	1852	20,265			15,444
Westminster	1747	27,705	29,655	27,749	30,366
COUNTRY OFFICES.					
Birmingham	1808	14,193	14,125	14,658	15,053
Birmingham District	1004	7,943		8,418	8,630
Essex and Suffolk -	. 1802	6,096	6,268	6.473	6,788
Hants, Sussex, and Dorset	1803	2,324			2,318
	1802	14,066			14,816
Kent Mutual	1852	2,610 18,160			2.814 21,544
Leeds and Yorkshire	1824	18,114			24,245
Liverpool and London -	. 1836	21,057		32,882	46,613
Manchester	1824	36,228	36,688	37,177	40,161
Midland Counties, late Lincolnshire	1851	1,869			2,848
Newcastle-on-Tyne	1783 1729	6,008	5,862		5,857
Norwich Equitable -	1797	2,693 75,130		2,816	2,901
Norwich Union Nottinghamshire and Derbyshire	1736	3,735		78,301 4,277	79,892 4,650
Provincial	1852	2,583			4,614
Queen	1857	-	_	<u> </u>	690
Royal Insurance, Liverpool .		25,037			41,035
Salop	1780 1808	3,833		3,956	4,105
Sheffield	1837	2,055 1,734		8,504 1,852	3,396
West of England	1807	49,928		51,130	1.943 51,525
Yorkshire -	1824	19,949		21,656	21,930
SCOTTISH OFFICES.		5375.44	25/375	,	,
	1805	0.00	0.000	1000	
Caledonian National	1841	9,814 5,341	9,633 5,677	10,920 5,779	11,407
North British	1809	19,344	20,414	21,215	5,973 21,668
Northern	1836	10,080		15,673	17,423
Scottish Union	1824	25,040	26,768	27,533	28,615
Scottish Provincial	1825	5,380	6,846	7,492	8,098
Irish Oppices.		-	120		
National	1822	5,609	5,767	5.935	6,242
Patriotic	1824	4,986		5,898	5,545
		47.70	21.20	-,	-,5,5

The value of property insured from fire, was-

In 1801	-	-	£232,240,000	In 1831	_	•	£526,650,000
1811	-	-	868,700,000	1841	-	-	601,540,000
1821	-	•	408,030,000	1851	-	•	722,000,000

IONIAN ISLANDS.—The total population of these islands in 1857 was 227,230, of these 50,664 was engaged in agriculture, 8528 in manufactures, and 6644 in commerce. The expenditure of the islands average about £140,000. The greater portion of the revenue is derived from customs duties, export charge on olive oil, currants, and wines, and import dues on general merchandise, foreign wines and spirits, tobacco, and grain, besides stamp duties and other miscellaneous charges. The live stock owned in the islands in 1857 comprised 11,080 horses, 8559 horned cattle, 109,780 sheep, and 90,563 goats.

The current crop has already been spoken of under the article CURRANTS. The yield of olive oil declined from \$14,152 barrels in 1855 to 73,118 barrels in 1857, although the acreage under culture with olives increased in the same period from 292,787 acres to 510,822 acres. The wine produced is about 150,000

barrels; a small quantity of cotton is grown.

IRON.—The invention of the process of puddling by Mr. Cort in 1784 opened a new and extensive field for the industry of the nation; coal became the medium of the manufacture of wrought iron instead of charcoal. The process has expanded the production of this kingdom from 17,000 tons in 1740 to 3,500,000 tons in 1859. The facility with which malleable iron can be produced with coal has caused the erection of magnificent and colossal ironworks, finding profitable occupation for a great number of men, and employing throughout the ramifications of its manufacture and its subsequent uses an amount of wealth almost incalculable.

The extended use of iron in the great manufactories, indeed, the entire substitution of this material for wood, in many instances where it was little used a very few years ago, has already raised the question among the best informed commercial men, as to how the supply is to be kept up to meet the progressive demand. Not only the rapid multiplication of steam engines and machinery of all sorts, but the construction of roads uniting the opposite shores of islands and continents, the building of ships traversing the seas of both hemispheres, and the erection of warehouses, churches, and whole streets of cottages, in all of which iron is the only or the principal material, show a demand for it which confounds all ideas of calculation. And, besides these grand fabrications of commerce, which the advancement of science has carried, on such a scale of magnitude, to the very outposts of civilization, invention has been actively employed among the lighter articles of domestic convenience and farming husbandry in bringing iron into extensive adaptation and wear. House-fittings of all kinds, pieces of room furniture, kitchen and yard utensils, and implements of the field, have been daily appearing of greater elegance of form combined with superior strength, because they, too, in the progress of mechanical art, have been fashioned of the universal metal. In the middle of the nineteenth century, while our travellers are carried by steam over iron roads and our merchants cross the ocean in iron ships, our grandmothers, at home, rest in iron arm-chairs, and our infants sleep in iron cots in the nursery. Truly it is an age of iron.

If the ratio of increase for the future is to advance equal to the past, it is esti-

mated that the production of iron in 1970 will have reached 490 millions of tons,

an aggregate transcending ordinary appreciation.

Beginning with 1806, the British production doubled in 18 years. It had again doubled at the close of the next 12 years; again at the close of 11 years, and it has very nearly doubled once more in the subsequent interval of 13 years. But allowing the consumption of the entire globe to double but once in 20 years— a moderate estimate, when it is considered that not one-eighth of its civilized or semi-civilized surface is yet covered with railroads, and that the demand for them for every quarter is urgent and hardly resisted—the total consumption of iron will be 14 millions of tons in 1875 and 28 millions in 1855.

The Scotch mineral field contains large quantities of argillaceous ore. The most valuable seams of carbonaceous or black band ores hitherto discovered belong to the Scotch coal field. The average yield of metallic iron from these ores is 35 to 41 per cent. So far from the iron-making materials of the United Kingdom being exhausted, as is represented by some, although in some of the smallest fields, as Shropshire and Staffordshire, a large portion of the cres have been wrought, in others there is still abundance. The present average consumption of ores of all kinds is about eight million tons, and at this rate the Welsh field alone contains a sufficiency of ore for supplying the iron-works of this country for 2000 years.

The annual consumption of iron in Europe and the United States is estimated at the present time at seven millions of tons. Of this great aggregate, Great Britain produces about one-half and consumes one-fourth. The figures are thus stated:

			Tons.			Tons.
Great Britain			8,586,000	Austria .		. 600,000
United States			1,000,000	Prussis .		200,000
France .			650,000	Denmark		20,000
Belgium .			950,000	Germany		200,000
Russia .			675,000	Spain .		. 97,000
Sweden and No	EWSY	•	179,000	1 -		
Italy	. •		72,000	Total		6,880,000

The rest of the world in Asia, Africa, and America, furnishes too little to be

computed; but may possibly raise the aggregate production to 7,000,000 tons.

Mr. Robert Hunt states the quantity of ore raised from all parts of the United Kingdom, and used in the manufacture of pig iron, in 1858 at 8,040,959 tons, and the produce of pig iron therefrom to have been 3,456,064 tons. The value of this being estimated by him at the furnace at £3 per ton, makes the total value of the produce £10,868,192, or taking the mean average price (deduced from all the sales of the year) at £3. 2s per ton, it gives a market value for the British pig iron of £10,718,798.

The following is his summary of the pig-iron produced in different districts in 1858:

		Tons.		Tons.
Northumberland	•	45,812	Northamptonshire	9,750
Durham		265,184	Gloucestershire	23,580
Yorkshire, North Riding		189,320	Wiltshire and Somersetshire	2,040
" West Riding .		85,936	North Wales	28,150
Lancashire	•	2,840	South Wales, Anthracite District .	50,774
Cumberland		26, 264	" Bituminous District .	835,704
Derbyshire		131,577	Scotland	925,500
Shropshire		101,016		
Staffordshire, North .		135,308	Total Produce, United Kingdom	8,456,064
South .		807 000	, .	

The foreign shipments of pig iron during the years 1851, 1852, 1853, and 1859, were as follow:—1851, 162,670 tons; 1852, 224,097 tons; 1853, 314,240 tons; 1859, 313,513 tons; of which the following are some of the more important particulars:

	1851.	1852.	1858.	1859.
	Tons.	Tons	Tons.	Tons.
United States	80,019	100,706	151,256	84,990
British America .	22,401	11,825	25,440	10,421
Germany .	81,341	42,229	42,750	18,559
Holland .	. 18,175	23,716	24,740	38,784
France	10.641	17,924	29,100	65,581
Italy	7,316	7,423	18,505	•
Denmark, &c.	5,939	6.419	8,020	
Spain and Portugal	5 897	4 174	8 040	

Retrospect of the Iron Trade of Great Britain since 1806, and the increased proportion which Scotland bears to the whole.

FURNACES IN BLAST, AND THE PRODUCTION IN GREAT BRITAIN IN

				THE YE	MRS:		
			Production. Tons.				
1806				216		:	243,851
1825				874		•	581,367
1840	_	•	_	402		_	1,396,400
1848	•	_	•	623	•	•	1.998.558
1852		•		655			2,701.000
1858				617			8,456,054
							w

OF WHICH THERE WERE IN SCOTLAND IN THE YEARS:

	Fur	naces in I	Slast.	Production. Tons.		Price.
1806	•	18	•	22,840		7 0 0
1818		18		23,450		8 0 0
1828		22	•	30,500	-	4 15 0
1833		81		44,000		2 16 0
1843		63		248,300	-	2 15 0
1858	Ĭ	114		740,000		2 1 0
1850		125		950,000		2 11 10

The increase and fluctuations in the number of furnaces in the various dis-The increase and incruations in the number of furnaces in the various districts, so far as can be ascertained from the varied and conflicting sources of information, are shewn in the following table. The increase in the South Wales and Scottish districts has been the most rapid and striking. In 1823 Scotland possessed only 9 furnaces, while in 1850 it had 113 in blast, and in the close of 1859, 125. In South Wales the number has more than doubled, having been in 1823 but 72, while in 1858 it amounted to 147:

Districts.		1823.	1825.	1828.	1830.	1840.	1847.	1850.	1858.
South Wales	•	72	82	89	113	_	151	143	148
North Wales	-	9	8	12	_	_		1	6
Shropshire	-	28	36	81	48	-	28	23	25
Staffordshire	-	84	81	95	193		93	118	180
Yorkshire		26	22	17	27	_	23	15	44
Derbyshire	-	15	14	14	īš i	_	900	19	28
	m								
berland, Durham -)	l I	_	_ 1		_	94	19	85
	Test				l i				-
Cumberland	· >	9	9	9	4	_			1
Forest of Dean -	- 1		_			_	_	iil	
Various		_		_	_	_		[•
Scotland	_ i	9	17	18	26	_	89	112	133
	- 1								
Totals		253	262	278	289	402	433	459	619

The increased production of each district between the years 1823-1850 is

not less striking.

The following shows the blast furnaces and production in each district in 1850:

	1	Blast Furnaces	•		
Districta.	In.	Out	Total.	Tons.	
South Wales: Eastern Northern Central Western Southern North Wales Shropshire South Staffordshire North Staffordshire North Staffordshire North Staffordshire Northshire (North) Yorkshire (South) Derbyshire Northumberland, Cumberland, and Durham Lancashire and West Cumberland Scotland Porest of Dean	54 60 10 12 7 3 23 105 18 10 5 19 19	19 10 10 22 4 2 10 43 8 6 8 10 19	78 70 20 34 11 5 83 148 21 16 18 39 38 8	10,000 90,000 600,000 88,000 28,000 90,000 10,000 10,000 600,000	
Totals	459	171	630	2,380,000	

The percentages of increase in the number of furnaces in the undermentioned districts, between 1823 and 1850, as compared with the total quantities of iron produced therein during the same period, is thus shewn:—

Districts.		Increase per cent. in number of furnaces	Increase per cent- of production.	Excess per cent, of production over increase of furnaces,
Scotland	_	1250	2800	- 1300
Staffordshire	_	140	500	860
Derbyshire	-	140	420	· 280
South Wales	_	200	1 400	200
100000 11000	- 1	Decrease.	1	1
Shropshire	_	40	60	20
Yorkshire	_	40	150	190

The extraordinary development of the power of production, which has enabled Scotland, with an addition to her furnaces of 1250 per cent., to increase the quantity of iron produced by more than 2800 per cent., is mainly to be attributed to the almost universal adoption of the hot blast—a system more generally in use in Scotland than in other parts. The more extended application of chemical and mechanical science may, however, be traced in the fact of the increased productiveness of each district. In the case of Shropshire the decrease in the number of furnaces is not easily accounted for, when taken in connection with the increased quantity of iron produced. The ore in this district is exceedingly rich, and the hot blast, we are informed, is in very general use in the county. The total quantities of iron produced, and the number of furnaces in the different periods for which any record exists, will be found in the following table:—

Years.	Furnaces.	Tons.	i Yeara.	Furnaces.	Tons
1740	59	17,850	1828	278	702,000
1750		22,000	1830	859	653,417
1788	85	68,000	1835	-	1,000,000
1796	121	125,000	1836		1,200,000
1802	168	170,000	1840	402	1,396,400
1806	169	250,000	1847	433	1,999,600
1820		400,000	1848	452	2,098,736
1823	253	442,000	1850	467	2,880,000
1825	262	581,000	1860	833	3,500,000

The value of the enormous quantity of pig iron produced in 1860 may be estimated at about 50s. per ton, which would give as the value of the rough iron smelted in that year a sum of £8,750,000. The value of the material after the further application of labour is, of course, very considerably increased. In some few instances such an amount of labour is bestowed upon iron, when converted into steel, as to cause it to realize as much as the more precious metals. A piece of iron small in weight will, by being made into watch-springs, yield a very large return for the labour expended upon it. A fair mode of estimating the value of a portion of the manufactured iron may be obtained from the table of exports. Thus, in 1858 the exports of iron, cast and wrought of all descriptions, exclusive of hardware, cutlery, and machinery, amounted in quantity to 1,357,156 tons, and the declared value was £11,364,859, being at the rate of nearly £9 per ton. If we estimate the whole of the iron manufactured in this country at this rate, it will give as the value of the iron manufacture in 1860 a sum of £31,500,000. This, however, does not include machinery or millwork, or the finer portions of the manufacture involved in the production of hardware and cutlery, the exports of which amounted in 1859 to over £7,527,000; and it will probably not be too much to place the entire value of the iron manufactured at a sum of £40,000,000.

The following table gives the production of each district in the years 1823, 1825, 1830, 1840, 1850, and 1858:—

Districts.	1	1823.	1825.	1830.	1840.	1850.	1858.
	٦	Tons.	Tons.	Tons	Tons.	Tons.	Tons.
South Wales	- 1	182,300	223,500	277,606	505,000	700,000	886,478
Staffordshire	- 1	133,500	171,700	212,600	427,650	655,000	733,117
Shropshire	- 1	57,900	86,300	73,400	82,750	90,000	101,016
Yorkshire	-	27,300	85,300	28,900	56,000	45,000	275,256
Scotland	- I	24,500	29,200	37,500	241,000	690,090	925,500
Derbyshire	- 1	14,000	19,100	17,900	81,000	60,000	131,577
North Wales	- 1		18,100	1 -	26,500	10,000	26,150
Northumberland	١l	_	<u> </u>	l —	11,000	90,000	45,312
Forest of Dean	31	2,320	8,000	5,329	15,000	80,000	23,580
Lancashire)		-		<u></u>	10,000	2,840
Totals	- 1	442,000	581,300	653,400	1,396,400	2,380,000	3,152,826

Some interesting results may be ascertained from these tables by a comparison of the number of furnaces in each year with the amount of iron produced, and the average produce of each furnace. The results are as follows:—

	Num	ber of Furnaces.	Average P	roduce of each Furnace.	
			Tons.	_	Tons.
1823		252	442,000	-	1700
1825	-	262	581,300	_	2200
1830	-	859	658,400	_	1800
1840	-	402	3,396,400		2400
1850	•	459	2,380,000		5200
1858		619	3.456.064	_	8590

The following shews the production of iron in the north of England district in the close of 1854:—

English Blast Furnaces and Rolling Mills North of the Humber.

Name of Firm.	Name of	Works.	In Blast.	Out Bist.	Total.	Pig Iron	Mal Iron
						Tons.	Tons
Derwent Iron Company	Consett	-	5	2 2	7	700	600
Ditto -	Crookhall	-	6	1 1	7	800	l —
Ditto -	Bradley	-	8	1	4	450	I —
Ditto -	Bishopwea		_	-	_	_	500
Bolckow and Vaughan -	Witton Par	nk -	4		4	500	300
Ditto -	Middlesbro	, -	8	_	8	400	300
Ditto -	Eston	-	6	_	6	750	l —
Ditto -	Eston		9	1	8	250	l —
Bell Brothers -	Clarence	-	8	1 —	3	400	l —
Ditto -	Felling	-	2	_	2	260	
Ditto -	Wylam	-	1	! —	1	120	l —
Losh, Wilson, and Bell -	Walker	-	4	1 1	5	560	800
J. Carr and Company -	Tyne Main	-	-	9	2	-	
Weardale Iron Company	Towlaw	_	4	9	6	500	l —
Ditto -	Stanhope	_	_	li	i	1 =	1 —
Ditto	Spinney M	oor -	=			1 —	300
James Wakinshaw	Monkwear				.	1	60
Hawks, Crawshay & Co.	Gateshead		_	! —	l —	1 _	250
Tyne Iron Company -	Jennington		2	1 —	2	1 180	80
Hareshaw Iron Company	Hareshaw		_	1 8	8	1	==
Bedlington Iron Company	Bedlington		2 2		2	200	150
Birtley Iron Company	Birtley	-	9		l ā	180	10
Gilkes, Wilson, Leatham,			-	•	1		1
and Bell	Middlesbre	' _ '	8	1 1 .	۱ ۵	400	l
Cochrane and Company	Ormsby		۱ <u>ـ</u>	ı ā	1 7	1 ==	_
B. Samuelson and Co.	Eston	_		3	3	1 =	1 =
Stockton Iron Company	Stockton	-	l =	1 5	1 5	1 =	=
S. Durham Iron Company						1 =	1 =
Snowdon and Hopkinson			_			=	200
- · · ·						· 	
Total -		• •	52	27	79	6600	8050

In the second quarter of 1843 there were in the whole of the South Staffordshire district only 71 furnaces in blast; in the same quarter of 1844, 91; in 1845, 103; in 1846, in the midst of the great demand for the new railways, and the enormous speculative purchases which at that time took place, there were, for about nine months of the year, 108 furnaces in blast. In 1847 and 1848 the number again fell off; in October, 1849, there were only 90 furnaces in, and 58 furnaces out of blast; subsequently ten of these were pulled down, and no material alteration occurred until the end of 1852, when the number again increased, and continued until the end of 1856, when there were more than 150 furnaces going. The returns in relation to the "mills and forges" are of the same character. During the last seven years the number of works in the district have very much increased. The following table gives the market price (which is always rather different to the trade price), of bar and pig iron of this district for every quarter for eleven years.—

		Pigs.	Bars.				igs.	Bars.
		per ton.	per ton.				ton.	
1846—First Quarter	:	.£5 0	£10 0	1851—Third Quarter			10	£5 15
Second .		. 4 10	90	Fourth			10	5 15
Third .		. 4 15	9 5	1852—First Quarter		. 2	10	5 15
Fourth .		. 50	10 0	Second		. 2	15	60
1847—First Quarter		. 50	10 0	Third .		. 1	. 0	6 10
Second .	•	. 4 15	9 15	Fourth			10	9 0
Third	_	. 4 10	9 10	1853 - First Quarter	•	. 4	10	10 0
Fourth .	•	. 8 5	8 0	Second		• 2	ĭŏ	9 10
1848-First Quarter		. 8 0	8 0	Third	•	• ;	15	9 0
						. :		9 0
Second	•	. 8 0	8 0	Fourth	٠		15	
Third .		. 215	6 10	1854—First Quarter £4	10	to a	0	10 0
Fourth		. 3 0	6 10	Second .			10	10 0
1849 — First Quarter		. 8 5	7 0	Tnird .		. 6	0	10 10
Second		. 3 0	6 10	Fourth		. (10	10 0
Third .		. 2 15	6 0	1855—First Quarter		. 4	1 10	9 0
Fourth	_	. 2 15	6 0	Second		. 1	15	9 0
1850 - First Quarter	•	. 3 0	6 8	Third .	•		10	8 15
Second	_	. 2 15	6 0	Fourth		• ;	1 .	9 0
Third .	•	. 2 15	6 0		•	•]		8 15
				1856—First Quarter		• 9		
Fourth	•	. 2 15	6 0	Second		. 1	10	8 15
1851 – First Quarter		. 215	6 0	Third .		. 4	10	8 15
Second	•	. 2 10	5 15	Fourth .		. •	. 0	8sto9 0

From the foregoing it will be seen that the lowest prices were in 1851, when the make of pig iron was not more than two-thirds of what it now is, whilst the means of conversion have increased in proportion. The number of furnaces existing and in blast, in North Yorkshire, in 1857, was as follows:—

Ironwo	rks.			Furnaces.	In Blast.
Cleveland	•			12	12
Witton Park			•	4	4
Ormesby				4	8
Tees .			•	4	3
Yorkshire			•	8	8
Clarence .				8	8
Stockton				3	2
South Durhem			•	2	2
Norton				287	284
Average number of furn	8008	in a	ctivity	during the yea	r 1856 .

At present we are largely indebted to Sweden for our supply of suitable iron for the manufacture of steel. The following figures give the imports thence since 1845:—

			Tons.	ſ			Tons.
1845			18,607	1853	_		23,540
1846			80,840	1854	•		24,436
1847		-	28,264	1855			36,428
1848			20,438	1856	•		88,741
1849		•	26,605	1857			44,282
1850	•		28,096	1858	-	•	23,889
1851		-	35,467	1859			42,718
1852	•		28,817				

If we add to this the import from Russia and Norway, and the steel made in England, the annual make here may be estimated at fully 50,000 tons. France produces about 15,000 tons of steel; Prussia, 6000 tons; Austria, 13,500; and the United States, 11,000.

PIG IRON WORKS IN SCOTLAND ON THE 1ST OF JANUARY, 1860.

D			Furnaces.	
Proprietors.	Works.	In Blast.	Out of Blast.	Total
Messra. William Baird and Company Ditto Company Dalmellington Iron Company Monkiand Iron and Steel Co. Messra. Addle and Rankin Messra. Wilsons and Company Messra. John Wilson's Trustees Messra. John Wilson's Trustees Ditto Robert Seewart, Esq. Shotta Iron Company Ditto Robert Seewart, Esq. Shotta Iron Company Ditto Robert Bell, Esq. Messra. Preeland and Lancaster Messra. William Wilson and Co. Forth Iron Company Loebgelly Iron Company Loebgelly Iron Company Messra. A. Christie and Company Messra. G. and J. Miller Messra. G. and J. Miller Messra. G. and A. Christie	Gartsherrie Egiinton Blair Lagar Mulrkirk Glengarnock Ardeer Carnbroe Coitness Dalmellington Monkland Langloan Summerice Dundyvan Clyde and Quarter Govan Clyde and Quarter Govan Calder Comos Shotts Castichill Wishaw Portland Kinnell Forth Lochgelly Lumphinnans Carron Devon Almond Gladsmulr Garscube Nithdale	18 7 4 2 9 4 4 8 4 9 6 6 4 7 8 5 5 8 4 2 4 8 5 1 4 1 1	3 4 3 1 1 1 2 4 3 3	16 7543946959688968453354741433123
	1	125	49	174

Furna	ces in	Blast		Make. Tons.	Shipments an	d Home Cons Tons.	sumption,	Stock. Tons.
31st December.	1843	•••	62	248,300		•••		•••
	1844	•••	78	295,000		•••		160,000
***	1845	•••	88	475,000		39 0,000		245,000
•••	1846	•••	98	570,000		666,000		149,000
***	1847		100	510,000		579,000		80,000
	1848	•••	108	580,000		562,000		98,000
***	1849		112	690,000		578,000		210,000
•••	1850	•••	105	595,500		\$35,000		270,000
***	1851	•••	112			680,000		
•••		•••		760,000				850,000
•••	1852	•••	113	775,000		675,000		450,000
***	1853	•••	114	710,000		960,000		210,000
***	1854	•••	117	770,000		860,000		190,000
***	1855	•••	121	825,000		847,000		98,000
•••	1856	•••	128	832,000		842,000		88,000
•••	1857		128	915,000		843,000		160,000
•••	1858	•••	132	945,000		810,000		295,000
***	1859	•••	125	950,000		915,000		830,000
	Pro	DUC	LION	OF MALLEAD	BLE IRON I	SCOTLAN	D.	
		Ton	B		Tons.		Tons.	
1845		35,00	10	1850	80,000	1855	110,000	
1846		45,00		1851	90,080	1856	125,000	
1847		60,00	Ď İ	1852	90,000	1857	100,000	
1848		90,00		1853	120,000	· 1858	90,000	
1849		80,00		1854	110,000	1859	100,000	

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AVERAGE PRICES of Pig and Bar Iron in Scotland for the last

					Tν	EN	TT-	BIX YEA	LRS.						
Years.		Pig :	Iron. d.	•	Ba	r Li		Years		Pig	Iron d.	•	Ba £	I I	on.
1834	÷	85	0		6	18	6	1847		65	4		8	5	ō
1835		90	Ó		6	10	Ò	1848		44	ā	-	Š	10	ŏ
1836		133	Õ	·	10	12	Ŏ	1849		45	Ğ	- :	Š	17	ě
1837	2	80	Ō		ġ	12	6	1850		44	Ž	:	5	9	ŏ
1838		80	Ō		9	5	Ō	1851		40	i		5	7	6
1839	-	90	ě		ě	14	ě	1852	·	45	5		10	10	ŏ
1840		75	Õ	- :	Š	7	ě	1853	- :	61	š	:	9	7	Ř
1841		60	Ŏ	-	7	4	Ŏ	1854		79	9	-	9	15	ŏ
1842		50	Ō	- :	Š	19	Ŏ	1855		71	ŏ	-	Ř	15	ŏ
1843	- :	55	Ŏ	Ĭ	Š	ō	ŏ	1856	:	72	ă	•	ă	17	ă
1844		54	Õ	- :	6	2	6	1857		69	ž	•	š	16	ě
1845	-	80	8		ğ	10	ŏ	1858		84	5		7	10	ŏ
1846	:	67	8	:	ğ	15	Õ	1859	:		10	•	7	7	6

The price of pig iron in 1810 was £9. 5s; in 1815, £7. 10s; in 1820, £7; in 1825, £11; in 1830, £5; in 1835, £4. 15s; in 1840, £3. 15s.

But in 1796, the quantity of British iron made was 125,000 tons. The quantity

But in 1796, the quantity of British iron made was 125,000 tons. The quantity of foreign iron retained for home consumption was 45,600 tons. The total exports of iron and hardware amounted to but 408 tons. The total home consumption to 170,100 tons. The contrast in 1850 and 1860 is striking indeed, as showing the progress of this manufacture. The figures for 1850 stand thus:

Tons.

British iron made 2,850,000 Iron and hardware exported 509,100 Foreign iron retained 28,000 Iron consumed at home 1,598,900

In connexion with the foregoing, the following table will show not only the rate of increase in the exports of iron, steel, and machinery, but also the gradually increasing proportion which, in the periods given below, the value of these exports bore to the total exports of the country. In 1814 they amounted only to 4.08 per cent. of the whole, and in 1858 to 16.80 per cent.

Years.	Total value of exports.	Total value of iron and steel, hardware, & mach'y.	Proportion per cent. to total Supply.
1814	£48.447.000	£1,772,000	4.08
1821	35,826,000	2,900,000	8.01
1831	87,102,000	8.514.000	9.46
1841	51,634,000	5,052,000	9.78
1850	71,367,000	9,633,000	12.65
1858	116,608,756	19,592,969	16.80

In 1825, the United Kingdom exported as follows:

Iron and steel, wrought and unwrought - 21,048,000
Hardware and cutlery - 1,392,000
Machinery and mill-work - 212,000

The declared value of all exports of British iron and unwrought steel, including hardwares and cuttery, machinery, and mill-work, was in 1823, £2,111,448; in 1830, £2,698,226; 1839,£5,231,631; 1847, £8,870,775; 1851, £8,594,961; and in 1858, £19,593,000.

The proportion from different ports, at which the shipments for 1851 were made, was as follows:—

Together - - £8,594,961

The quantities of foreign iron imported into the United Kingdom in 1854 were as follows:—iron ore, 851 tons; chromate of iron, 2670 tons; pig iron, 898

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tons; bar iron, unwrought, 41,745 tons; iron wire, 770 tons; iron bloom, 762 tons; iron slit or hammered into rod, 53 tons; old, broken, and cast iron, 751 tons; iron hoops, 26 tons; cast iron, 52 tons; unwrought steel, 1408 tons; steel scrap, 226 tons; wrought iron and steel manufactures, 15,458 tons; and fancy ornamental articles of iron and steel, 323 tons. The quantity of foreign iron exported was 27 tons of chromate of iron, 4341 tons of iron in bars, unwrought, 1340 tons of unwrought steel, and 3810 tons of iron and steel machinery and manufactures. The quantity of British iron exported in 1854 was as follows:—293,432 tons of pig iron, 604,662 tons of bar iron, 12,056 tons of bolt and rod iron, 69,338 tons of cast iron, 7937 tons of iron wire, 26,084 tons of anchors and grapnels, 30,709 tons of hoops, 8141 tons of nails, 111,269 tons of other sorts (except ordinance), 12,242 tons of old iron, and 20,793 tons of unwrought steel. The quantity of British hardware and cutlery exported from the United Kingdom in 1854 amounted to 32,054 tons, and the declared value to £3,867,598. In 1853 the quantity was 32,375 tons, and the value £3,665,051.

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IRON MANUFACTURES, &c. EXPORTED IN 1858.

Articles.		- 1	Tons.	Value.
				£.
Pig iron .		1	863,163	1,084,290
Iron ore .		. 1	1,144	774
Bar iron		. 1	233,587	1,909,483
Railroad iron		. 1	433,250	8,565,224
Bolt and rod iron			26,406	224,269
Cast iron			78,202	823,084
Iron wire	:	: 1	10,220	209,073
Anchors, &c.	-	- 1	16,772	261,500
Iron hoops .	:	: 1	32.R67	820,799
Iron nails .	•	· 1	13,055	800,245
Sheet iron, boilers, pla	aton Aco	. 1	53.841	596,140
Other sorts .		~	58,849	1,293,214
Chromate of iron		: 1	82	1.304
Old iron .	•	٠,١	18,937	94.889
Steel .	•	. 1	17,860	620,303
Ordnance .	•	• 1	4,428	60,968
Organice .	•		1,120	00,200
Total		.	1,857,156	11,364,659

This is exclusive of hardware and cutlerv to the value of £3,277,607; machinery and mill work, £3,599,352; and tinned plates, £1,351,151, which makes a total export iron trade of £19,592,969.

United States.—The growth of the iron trade and manufacture of the United States, during the last forty-five years, has been enormous. In 1816 there were 153 furnaces, producing 54,000 tons of pig iron; in 1845 there were 540 blast furnaces, averaging 900 tons each annually, yielding 486,000 tons; and 950 bloomeries, forges, rolling and splitting mills, yielding of bar, and hoop iron, &c., 291,600 tons—and of blooms, castings, machinery and stove plates, 151,500 tons—making that year an aggregate of 929,100 tons, of the value of 33,940,500 dollars. In 1853 the rapid increase in this class of manufacture was such as to yield much more than a million tons of pig-iron.

The American railway companies have been pressing upon Congress to procure a refunding of the duties paid upon imported railway iron within the last ten years. This would amount to about 14,000,000 dollars, all collected upon English manufactures. The annual report of the Secretary of the Treasury makes some interesting statements of the growth of this branch of industry. The State of Pennsylvania alone manufactured in 1855, 439,186 tons of pig iron, and of finished iron 227,837 tons, of which 127,550 tons was nails, rods, and bars; 82,107 of rails, 21,505 of sheets and plate, and 2675 of hammered bars. This is only from one iron district, yielding about half the annual production of the country. The whole annual production of the United States is now about 1,000,000 tons, and the consumption was 1,386,000 in 1855. The manufacture of the United States is already as large as that or Great Britain was in 1835. In the year 1810, the production of iron in the United States amounted to

50,000 tons, from which amount it slightly and gradually declined onward to 1820. Between that and 1840, it increased through almost uniform gradations till it reached 325,000 tons. In Pennsylvania but 100,000 tons were made in that year, although in 1842 the production amounted to 190,000. Throughout the whole country, the two years 1840 and 1841 witnessed a decline of nearly 100,000 tons, when the production began to rise rapidly and steadily till it reached 800,000 tons in 1847 and 1848. In consequence of the pecuniary revulsions and disquietudes of that period, the domestic manufacture of iron fell by gradual stages to 500,000 tons in 1854; from which epoch it again rose at a uniform and rapid rate, till in 1855, it amounted to 1,000,000 tons. In 1847, the production in Pennsylvania was 389,350 tons; but it sunk, in 1849, to 253,370 tons. In 1854, it had increased to 424,234 tons, with 201,963 tons of finished iron. In these ironworks of Pennsylvania more than thirty millions of dollars are invested; and more than 40,000 men and boys are employed in the two branches of the business—the making and the finishing—who represent, it is supposed, a population of nearly 200,000 souls, a very considerable fraction of the whole population.

The subjoined statement shows the value of iron and articles wholly or in part composed of iron, imported into the United States in 1852:—

Pig fron	Dollars. 1,142,717 10,650,191	Brought over Cutlery .	.•	Dollara. 18,791,502 1,607,158
Manufactures of cast Manufactures of wrought. Manufactures not specified	1,219,202 3,460,112 2,319,280	Other manufactures com of steel in part Old iron	pose	1 916,889 311,444
Carried over .	18,791,502	Total .		21,626,998

About 30,000 men are employed in the United States in iron castings; 25,000 in the manufacture of pig iron, and 14,000 in wrought iron.

The following statement shows the value of iron of all kinds imported into the United States.

Years.			Dollars.	Years.	Dollara.
1821			1,218,041	1851	9,113,862
1831	•	•		And manufactures of iron	8,183,143
1841	•	•	4,020,662	1858	17,828,039

France.—The make of iron in France has been as follows:--

Years.	Pig Iron.		Bar Iron.
1824	tons 194,636		tons 139,564
1836	803,739		201,691
1847	583,054		371,252
1859	 615 109	•	997 449

In 1825 France took only 3273 tons of British iron; in 1852 she took 22,813 tons, in 1854, 42,234 tons, in 1857, 119,967 tons, and in 1859 but 75,531 tons.

IRON MANUFACTURES. It is estimated that upwards of 400,000 persons are employed directly in the hardware and cutlery manufactures in England, and the aggregate value of such goods produced annually exceeds £20,000,000.

Hardware is a term employed to denote every description of metals when manufactured into articles of use, whether of iron, copper, tin, brass, or pewter, &c. consisting of all kinds of implements, such as edge tools, spades and shovels, scythes and sickles, screws, hammers, hinges, spoons, anvils, vices, sad irons, tubes, guns, &c. The principal seats of manufacture are in Birmingham, Wolverhampton, Dudley, Walsall, and those neighbourhoods. Cutlery is the term used to designate all kinds of sharp cutting instruments, such as table knives and forks, razors, scissors, swords, penknives, surgical instruments, &c. The great seat of manufacture is Sheffield. Liverpool is the great outport for all these manufactures to the Western world; and, if under this head we include wire, nails, chains, anchors, mill-works, castings, machinery, steam engines, &c., we find altogether upwards of 100,000 tons exported in 1850 from that port, amounting in value to £3,500,000. Steel, bars and pieces of wrought iron hardened by

a peculiar process, is principally made in Sheffield, where there are sixty-two establishments, with fifty-six furnaces, for converting iron into steel, and seventy-four engines, with 1,353 horses. Three sorts of steel are manufactured, called blistered, shear and cast, the last-named being the most valuable, serving to make the blades of penknives, razors, surgical instruments, swords, and all kinds of cutlery.

kinds of cutlery.

The price of bar steel varies according to the price of the iron from which it is made, but as a general average, its price in commerce may be taken at £5 per ton beyond the price of the iron from which it is made. Bar steel produced from the better irons is usually dearer than the common kind on account of their scarcity. In 1855 the approximate prices were, shear steel in ordinary size, £60 per ton nett, coach spring steel from foreign iron, £22 nett; and pure English iron, £18. The manufacture of steel in England is now about 50,000 tons, and is chiefly confined to Sheffield.

In 1855 the weight and value of the steel made here was as follows:—

7,000 tons of cast				- 	474	£1,035,000
double a 10,000 tons coach a	hear steel,	average	£35	loc' srufte	-	245,000 190,000
40.000 tons	_	_	_	_	_	£1.147.000

In 1852 the quantity of unwrought steel sent from Sheffield to Liverpool for shipment, chiefly to the United States, but also to the Mediterranean and East Indies, amounted to 80,000 bundles of 1½ cwt., and 22,000 long narrow cases, averaging five cwts. each, being altogether 19,500 tons in weight, and £425,000 in value. Besides these, 4000 casks of files, weighing 2000 tons, worth £230,000, were forwarded from Sheffield through Liverpool, principally for shipment, and which come generally under the denomination of steel, but should more properly be placed in the category of hardware or cutlery. The manufacture of steel in Sheffield is now said to be 2500 tons monthly, with every prospect of an increase of 25 per cent.; the bulk of this trade is for exportation through the port of Liverpool.

The declared value of the exports of hardware and cutlery were in 1845,

The declared value of the exports of hardware and cutlery were in 1845, £2,183,000; in 1850, £2,641,432; in 1855, £2,960,391; and in 1859, £3,826,030. Of the exports in the last-named year, £1,179,039 went to the United States, £472,007 to Australia, £270,010 to India, £215,526 to Germany, and about £150,000 each to Brazil and British North America.

ISINGLASS. Besides the isinglass obtained from the sturgeon—different species of isinglass are now imported from Brazil, Canada, the Hudson Bay Company's Territories, India, and other quarters.

The following shows the present sources of the supply and price:

Countries	.		1853.	1858.	Average Price per Cwt. in 1886
Russia United States Brazia East Indies Britiah North America Britiah Guiana Other parts	:	:	Cwts. 1086 ————————————————————————————————————	Cwts, 1184 30 417 344 33 73 45	£ a. d. 41 0 8 18 1 4 18 9 10 13 16 6 29 0 8 20 4 5 30 4 11
Total	•	•	2284	2026	\ <u> </u>

IVORY. In 1827 we imported upwards of 3000 cwt. of ivory; in 1842, 5000 cwt.; in 1850, 8000 cwt.; and in 1858, 12,279 cwt., nearly all of which was taken for home consumption. The trade returns embrace all ivory under the designation of "teeth," and these include those of the sea-horse.

The African elephant yields the largest tusks. Mr. Gordon Cumming had

one weighing 173 lbs. Mr. Cawood, of Graham's Town, had a pair in his possession, weighing 330 lbs. A tusk was recently shipped from Camaroon to Liverpool, weighing about 164 lbs.; and, two or three years since, one to Bris-

tol, weighing about 147 lbs.

At the Great Exhibition in 1851, some tusks of the African elephant were shown, which weighed 162 lbs. each, measured 8 feet 6 inches in length, and 22 inches in basal circumference. It is a singular fact that the domestication of the elephant is usually attended by the deterioration of the length and quality of the ivory. The grinders, or teeth proper of the elephant are worthless, or of but little use, and on the West Coast of Africa are never purchased.

The total imports of ivory in the last six years have been as follows, specifying also the quantity from Africa and the Mediterranean ports respectively,

in cwts.:-

١.

Yeara.	Africa.	Mediterranean.	Total.
1853	4,882	1,288	10.388
1854	8,462	1,048	9, 299
1855	8.974	871	8,376
1856	1,779	1.819	9,866
1857	2,735	2,415	9,890
1858	8,146	2,945	19,279

The imports from India and the East, according to a parliamentary paper, have been in the last ten years:—

		Cwts.	ı				Cwts.
1849		4058	1854				8642
1850		3444	1855				2748
1851		2580	1856	•	-	:	5027
1852		4425	1857				8349
1853		8880	1858		•	•	5300

The estimated value of the ivory imported has been as follows:-

				Average P	rice	per C
		£.		£.	8.	ā.
1854	-	230,420	***	25	10	0
1855	•••	219,964	***	26	10	0
1856	•••	843,517	•••	85	18	0
1857	•••	421,318	••	42	18	0
1858	•••	410,608	•••	34	1	0

From Ceylon the quantity exported has not averaged during the last five years £200 in value. The quality of the African ivory varies considerably. That best adapted for the English market comes from the Canaroon coast, and the most esteemed runs from 50 lbs. weight upwards, the next in value 35 lbs. to 50 lbs., then from 18 lbs. to 35 lbs. All below 18 lbs. are called scrivelloes, and are of the least value, except those adapted to cutting billiard balls, which, in proportion to their size and cost, are the most valuable of all. Tusks are valued in proportion to their size; those that weigh 1 cwt. or more are the best, and fetch from £40 to £50 the cwt.; the second class comprehends such as require two teeth to make a cwt. or more; the third class, three or more to the cwt.

Gaboon, Loango, Congo, and Ambris, are next to the Camaroons in quality for ivory. Gaboon and its immediate neighbourhood, being that part of the coast which is made their head-quarters by the Liverpool and Bristol traders, exports an enormous quantity of ivory annually to all parts, but principally to Brotand France and the United States and less than 80 tons.

exports an enormous quantity of ivory annually to all parts, but principally to England, France and the United States, not less than 80 tons.

The Gold Coast ivory, and that brought down for shipment to Sierra Leone and Cape Coast Castle, ranks next, and is tolerably good. Gambia teeth are usually very bad, always broken, very crooked, cracked in the hollows, and more

or less damaged.

Fine ivory is known by having no cracks or flaws, either in the solid or in the hollow. Cracks in the ivory are a serious detriment, and must be always particularly noticed. The elephant's tusks that are only rather tapering in shape are most liked; very crooked teeth must be guarded against, as they cut up to great disadvantage. Broken-pointed teeth, or those with deep flaws, or

otherwise damaged about the point, must be avoided. Teeth with large hollows are not at all liked, as there must inevitably be a great waste in cutting them up; in short, a fine tooth is known by being of a neat tapering shape, and a small hollow, free from cracks, with a fine, thin, clear coat, free from flaws; it is also transparent, which may be discovered by holding the point to a candle.

The Gold Coast ivory may generally be known by having a rough hewn hole made near the end of the hollow, and are teeth much esteemed.

The annual consumption of ivory in Sheffield is to the extent of about £60,000 in value, and about five hundred persons are employed in working it up for trade. The number of tusks required to make up the weight consumed in Sheffield, about 180 tons, would be 45,000. According to this, the number of elephants killed every year is 22,500; but supposing that some tusks were cast and some animals died, it might be fairly estimated that 18,000 are killed

for this purpose.

JAPAN. The trade of Japan so long a scaled book to the world of commerce, was opened in 1854, by Commodore Perry, who on the 18th March of that year, concluded a treaty with that nation by which two ports were opened for trading purposes—Simoda, in the Gulf of Idau, and Hakodadi, in the Straits of Sangor, on the Island of Jesso. In August, 1858, a treaty was signed on behalf of Great Britain, by which the following ports were opened to British subjects:—Hako-dadi, Kanagawa, and Nagasaki, on July 1st, 1859; Nee-egata, or some other port on the west coast of Niphon, January 1st, 1860, and Hioga on January 1st, 1863. After January 1st, 1862, British subjects to reside at Yeddo, and after January 1st, 1863, in Osacca, for the purposes of trade only. An import duty of 5 per cent. is levied on building materials, rice, metals (except precious metals and corn, which are free), machinery, raw silk, cotton and woollen goods. Intoxicating liquors are charged 35 per cent. Unenumerated goods pay a duty of 20 per cent. Japanese products pay an export duty of 5 per cent. Already a fair amount of trade has been carried on with Japan. Cargoes comprising Japan vegetable wax, a solid fat (obtained from the berries of the Rhus succadensa), tea, lacquered wares, bronze articles, and other goods have come in.

The islands are said to contain at a moderate computation fifty millions of inhabitants, and two of the chief cities have a population of upwards of a million souls each. The indigenous products are numerous. The rice grown is considered the best in Asia, and they cultivate as much hemp and cotton in their fields as they can find room for. The whale fishery is prosecuted on many parts of the coast. Osacca is the commercial metropolis of the most fertile and populous portion of the empire, and built at the mouth of the only navigable river. Matsmai, a large town with about 60,000 inhabitants, is situated on a bay at the south-west part of the island of Jesso. A Japanese Embassy has lately (1860) visited the United States, and we may probably expect to see a Japanese Mi-

nister domiciled in London.

To Europe the removal of the embargo formerly laid on trade with this populous and civilized nation, has afforded commercial facilities and maritime advantages; and to the Japanese the benefits of the introduction of Christianity, European arts and manufactures, the improvements of science, and greater

political liberty are offered.

JAVA. The area of the Islands of Java and Madura is 51,336 square miles, and according to recent official statistics, the population now amounts to 20,352 Europeans, 138,356 Chinese, 24,615 Arabians and other foreign Orientals, 11,405,358 free natives, and 5260 native serfs, making together a total of 11,594,158. The population of the other Dutch possessions in the Eastern Archipelago is 5,477,640, making a grand total of more than 17,000,000 under Dutch laws and the Dutch flag.

The duties and dues levied, brought in 1854, £669,660. The merchandise imported in that year was to the value of £2,823,112, and the specie £535,905. The exports were merchandise £5,688,378, and specie £382,085. The quantity of produce raised in the island in 1855, was 1,516,602 cwts. of coffee; 1,484,727 cwis. of sugar; 803,532 lbs. of indigo; 1,604,411 lbs. of tea; 218,088 lbs. of cinna:

mon; 169,109 lbs. of cochineal; 653,871 lbs. of pepper; and 3270 lbs. of tobacco; the tobacco raised in the two previous years averaged 2,500,000 lbs.

In 1858 the value of the trade amounted to £14,747,414 or £2,258,538 more than that at Singapore, and less than that of the whole Straits Settlements by £1,682,738. The chief articles of produce were indigo, coffee, rattans, rice, spices, sugar, tobacco and tin. The ships, which arrived in 1858, amounted altogether to 2882, with a tonnage of 222,900 lasts, or 445,800 tons. The number of ships, which left Java and Madura in 1858 was 3344 with a tonnage of 237,776 lasts or 475,552 tons.

The following figures show the progress of the trade of Java and Madura:-

Yeara.	Imports, including Specie.	[Exports.
	£	L
18 42	2,173.483	4,865,291
1848	1,879,282	4,916,069
1844	2.111,862	5,840,470
1845	2,257,650	5,491,264
1846	2 282 209	4,846,482
1847	1.973.264	
1848		4,963,765
1849	1,757,509	4,874,005
	2,008,924	5,025,526
1850	2,083,499	4,804,741
1851	2,548,538	6,032,654
1852	2,626,298	4,805,569
1858	2,665,409	5,862,980
1854	8,359,017	6,070,463

The quantity of produce raised in the island of Java in 1851 and 1855, was as follows:—

		 	1851.	1855,
Coffee		cwts.	1,387,572	1,516,605
Sugar		cwts.	1,524,958	1,484,726
Indigo		lbs.	954,825	808,581
Tea	•	lbs.	1,023,878	1,604,41
Cinnamon	•	lbs.	211,067	218,086
Cochineal		Iba.	172,885	169,100
Pepper		Ibs.	1,022,147	653,871
Tobacco		lbs.	271,856	3,27

Our export trade with Java has been largely on the increase of late years. In 1840 the whole value of the British manufactures exported to Java, with Sumatra, was but £349,521; in 1850, the exports to Java alone were valued at £507,499; and in 1859, they had risen to £1,037,088.

JUTE, a name for the fibre of Corchorus olitorius and C. copsularius, plants extensively grown in India. There is a large export trade in jute, which is now much used in some of our manufactures, mixed with flax, or as a substitute for it. In the imports jute, sunn, and other hemp-like fibres are mixed up in the trade returns. Although it is comparatively a recent article of English commerce our imports from India reached 1,088,249 cwts. in 1859. Besides the large shipments to Great Britain and America, it is also extensively used in India, almost all the small Hindu farmers weave cloth of it, and every farmer requires some for the use of his farm. Various thick coarse fabrics are made from it, of which whole cargoes amounting to tens of thousands of pieces are now annually taken off by the Americans from Calcutta for cotton bagging and similar purposes. Mention has been made of this trade under the heading Gunny-Bagging. Besides being extensively employed in the manufacture of coarse goods, such as carpetings, bags, sacks, and even mixed with canvas or sail-cloth, it is now used in Dundee for many finer fabrics, such as with the cotton warps of cheap broad cloths, to mix with silk, &c. The shipments of jute from India now average about 46,000 tons a year.

LAC. The quantity of this resin imported in various forms is very considerable. In 1858 the imports of shellac were about 20,000 cwts. and of lac dye 12,000 cwts.

LACE AND BOBBIN NET MANUFACTURES. In 1850 there were 3200 machines (34,382 quarters width) at work, returning £2,300,000, employing about £2,965,945 capital, and 133,015 hands. The capital in bobbin-net machinery alone was estimated at £1,359,445. In 1856 the machinery was increased to 3500 (full 40,000 quarters in width), and greater power in production in the new ones. A far larger proportion was employed upon silk materials, and the number of frames making fancy goods forms now far the largest proportion. These changes will serve to account for the very large increase in the returns of the trade in 1856 beyond 1850. In the latter year, 1050 machines at least were rotary circulars, making plain goods by power in factories; 1050 making fancies were worked by power, probably more. About 2158 machines in all, partly "levers," partly circulars, some pushers, and some traverse-warps, made fancy goods. The materials are all imported, and cost on importation £920,000. The returns were about £3,680,000. This left for wages, interest, and profits, £2,760,000. If to these figures be added the cost of raw materials (all imported) in the warp lace trade, £60,000, and the ultimate returns, £360,000, the result of the operations of the entire machine-wrought English lace trade will be:—Raw materials used, cost £980,000; total returns, £2,040,000; paid in wages, interest, wear and £5,000. The entire number of hands employed may be stated at 135,000. In embroidering and finishing of lace, including wages at the machines, as well as the subsequent processes, there was paid to at least 130,000 hands, in 1856, £2,200,000 in wages alone, in this department of the Notting-ham lace trade.

The value of the cotton lace and patent net exported in 1859 was £397,035; and of the linen lace, £3448. The imports of lace in 1858 were, thread or cotton pillow lace, chiefly from Belgium, £17,988; silk lace, principally from France, £21,504. Empsels point and other kinds, £3774.

France, £21,504; Brussels point and other kinds, £3774.

LABD. The quantity of lard imported from America is very large. In the three years ending 1850, it averaged 12,000 tons per annum, but of late years it has not been so much, for in the three years ending 1859, the imports from the United States averaged only about 7000 tons.

LEAD. The average production of lead ore in the United Kingdom in the ten years, ending with 1857, was 90,656 tons, from which 63,800 tons of lead was obtained. The quantity of ore necessary to obtain 100 tons of lead was 142 tons; the proportion of lead to ore being about 70 per cent. The value of the lead ore raised in 1858 was 95,855 tons, worth £1,370,726, and the mineral obtained therefrom 68,803 tons, valued at £1,489,005. The ratio of pig lead produced in the ten years ending 1858 in the several districts of the kingdom was —in England, 70 per cent.; in Wales, 21½; in Ireland, 2 8; in Scotland, 2.4; in the Isle of Man, 2.9.

The imports of lead ore in 1858 were 2207 tons, and of pig and sheet lead 14,139 tons. The exports of lead were—

Years.		Tons.		Declared Value.
1856	•••	23,134	••	£582,269
1857	100	22,088	994	549,523
1858	***	19,555	•••	459,954
1859		20,491	•••	480.943

LEATHER. The uses of leather are so numerous that it is somewhat difficult without any official data to form any correct estimate of the extent of the home consumption. If we take the article of shoe leather alone, and allow half the population of the United Kingdom (say 14,500,000 persons) to use two pairs of shoes per annum, and calculate them but at 5s per pair, we get at a money value paid for this single article of £7,125,000. But there are numberless other uses of skins and leather, for saddlery and harness, fire buckets and hose, portmanteaus, buff leather, shamoy, gloves, parchment, book-binding, upholstery,

&c. In 1850 it was calculated that there were about 6,000,000 hides and skins adapted for various descriptions of leather annually imported. The number now received annually is nearly 10,000,000; sheep and goat skins it will be perceived have largely increased.

If we take the total imports of foreign hides and skin to weigh-

The common estimate is that one ally slaughtered. This would is round numbers—					Tons. 80,000
4,000,000 ox and cow hides at 30 lb	6.			about	54,000
500,000 calf skins at 40 lbs.		•	•	about	9,000
8,000,000 sheep and lamb skins at	l lb.	•	•	troda	8,570
100,000 horse hides at 14 lbs.		•	•	about	625
100,000 goat skins at 1 lb.	•	•	•	about	45
This would give a t	otal of			. Tons	97,240

About 14,000 tons of hides and leather are, however, now exported. There are about 500 tanneries in the United Kingdom, employing from 350,000 to 400,000 persons directly and indirectly. Supposing the foregoing estimate to be an approximation to the truth, this would give a total of about 83,000 tons of leather used here, which taking it at an average of 2s per pound, would give a sum of £18,592,000; but probably £30,000,000 would be nearer the aggregate value.

The following statement shows the number of unmanufactured hides and skins imported into Great Britain for tanning and leather dressing; a portion of these, however, are re-exported in the raw state:—

				1840.	1850.	1858.
Hides			cwts.	407,112	591,921	861.687
Seal skins			No.	560,596	779,924	719,926
Goat skins		•	No.	887,486	479,541	1,941,870
Sheep skins		•	No.	91,682	389,557	2,449,476
Lamb skins.	dressed	and undi	ressed, No.	1.792.507	1,919,018	1,815,418
Kid skins		•	No.	713,942	501,374	478,655
Deer skins			No.	411,785	93,472	98,779

The import of hides in the last column is for 1859. The total value of hides and skins now imported may be taken to be about £3,500,000.

IMPORTS OF MANUFACTURED HIDES and other MANUFACTURES OF LEATHER.

			1840.	1850.	1859.
Hides, tanned, &c. Russia Hides Boots, shoes, goloshes, &c. Gioves	:	lbs. No. pairs pairs	8,954 5,580 1,543,917	1,896,798 — 8,960,101	4,962,192 713,274 4,590,261

DECLARED VALUE of the EXPORTS of LEATHER MANUFACTURES of BRITISH PRODUCE.

	1840.	1850,	1859.
Leather, wrought and unwrought . Saddlery and Harness .	£ 320,912 96,162	£ 484,905 123,960	£ 1,708,072 289,631
Total	417,074	618,864	1,997,703

Prices of TANNED LEATHER at the close of each Year from 1847 to 1859 inclusive.

Years.	Crop Hides.	English Butta.	Foreign Butts.	Crop Bellies.	Crop Shoul- ders.	Common Dressing Hides.	Harness and Saddlers Hides.	
Dec. 1847 1848 1849 1850 1851 1852 1853 1854 1856 1857 1858	81 to 16 7 - 16 7 - 16 8 - 16 91 - 15 12 - 18 12 - 18 13 - 18 154 - 21 16 - 22	11 to 23 9 - 23 84 - 23 10 - 23 10 - 22 11 - 20 124 - 29 15 - 26 20 - 27 18 - 28 15 - 35	9 - 15 84 - 16 94 - 16 95 - 16 92 - 164 124 - 19 124 - 19 124 - 22 18 - 25 18 - 26	54 to 64 5 - 64 44 - 6 5 - 6 54 - 64 74 - 9 94 - 11 9 - 11 10 - 12 9 - 12	6 - 8, 61 - 9 74 - 10 8 - 102 91 - 11 122 - 14 12 - 14 13 - 18 15 - 19 13 - 17	64 - 81 7 - 9 74 - 10 74 - 10 94 - 11 124 - 14 12 - 14 14 - 154 154 - 164 16 - 18	9 -13 9 -13 9 -13 9 -13 9 -13 10 -13 13 -15 13 -16 16 -18 16 -18 18 -30 15 -19	9 to14 7 -11 7 -11 8 -11 9 -12 101 -13 14 -16 121 -16 15 -181

Years.			K	ipa,		L	Calf Skins.													
ł .		Pe	tersb.	E	India	90	to88	m.	35ta	401	b. 4	Oto	601	D.	60t	080	ъ.	801	o 1:	
December.	_	đ.	ď	<u>.</u>	d	I.		ā	4	-	ماه	ı.		d.	d.		ď	a.		_
1847	•	111	tol4	9	to16	hi	to	19	12	to :	13	3	to	24	15	to	21	12	to	19
1848	-	111	-16	9	-17	ll 10		18	111	- 9	21/1	2	-	22	14	-	20	12	-	18
1849	_	hil	-17	9	- 16	llió	-	17	101	- 9	20	ī	•	20	14	-	19	11	-	17
1850	_	iii	-15		1 - 16	lio	-	18	iiI	- 9	20	2		21	14	•	18	īī		15
1851	_	iii	- 15	9					ii"		18.			19	13	-	17	iī		15
1852	_	155	- 15	9				16	īī		18		_	18	hī2	_	17	īī		151
1853	-	13	- 18	hi	- 18			21	114		23				15	_		19		20
1854	-	lis	- 18	liō			_		121		23		_			_		12		30
1855		lia	- 18	lii	- 19	13			131		23		_		15	_		13	_	93
1856	Ξ	îğ	- 94	liż	- 24	17		27			20		_		17	-		15		25
1857	-	liš	- 24	lis		liż		26	1= -		27		Ξ		17	Ξ	26			54
1858	-	16	-20	12		lia		ũ	15		25		_		14	_	93	•••		23
1859	-	17	- 23	ii	- 24	16		28	17		80		-	31	15	-	27	14	-	25

1	Horse	Hides.		Australian	N. America					
Years.	English.	S. Amer. without Butta.	Basils.	Tanned Hides and Sides.	Hemloek Tanned.					
December, 1847 - 1848 - 1849 - 1850 - 1851 - 1852 - 1858 - 1854 - 1855 - 1856 - 1856 - 1857 - 1858 -	d. d, 10 to 15 8 - 18½ 7½ - 18 7 - 12 7 - 11 7 - 10 8½ - 11 8½ - 10 12½ - 14 14 - 16 11 - 15	d. d. 80to156 80-140 60-110 56-110 50-120 50-180 40-136 40-120 70-160 60-176	d. d. 7 toll 5å - 11å 5å - 11 5å - 11 7å - 12 11 - 15 9 - 15 6 - 14 9 - 15 9 - 15	d. d. 5, to 6 4 - 5 5 - 5 5 - 5 5 5 - 6 5 7 - 8 9 - 10 9 - 10 13 - 14 12 - 18	d. d. 6 to 64 6 - 54 6 - 54 5 - 64 5 - 74 9 - 94 8 - 9 114 - 124 10 - 11					

Prices of FOREIGN RAW GOODS, at the same Periods.

	Bue Mon	nos Ayre le Video	s and Hides.	Rio G	rande.	Саре	Саре	Austra-	West India
Dec	Dry.	Salted Heavy Ox.	Light Ox and Cow.	Salted Heavy Ox.	Light Ox and Cow.	Hides Salted.	Kips Salted.	lian Salted.	Hides Salted.
1847 1848 1849 1850 1851 1852 1853 1854 1855 1856 1857 1858 1859	8 - 6 8 - 6 4 - 7 4 - 6 4 - 7 5 5 - 8 7 - 9 7 - 1 10 10 1 - 15 11 - 14	4 - 4 4 - 4 5 - 5 6 - 7 8 - 6 6 - 7		3 - 3 28 - 8 34 - 4 34 - 3 31 - 4 4 - 4 4 - 5 6 - 6 78 - 6 54 - 6	3 to 8 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1 - 8 11 - 8 11 - 8 12 - 8 21 - 4 22 - 4 3 - 5 3 - 6 3 - 6 24 - 6	4 - 6 4 - 6 4 - 6 5 - 6 6 - 7 7 - 9	34 - 54 5 - 75	14 - 23 14 - 24 2 - 34 24 - 3

		8	ou H	th									Drysalted and Brined East India Kips.												
_		1	נז(۲.			86	ı	ed.		1	Kip	ph L		7 lirst	lbs s.		7]			7 1 hird		Fi	15 est a	
Dec	-	d.	_	1	d.	-	ā	_	_		d.	_	đ.	d.		ď	d.	_	d.	4		d.	a.		4
1847	6	ō	to						īō			to			to	9	5	to		31	to	5	5	to	7
1848	4	6	-	5	0	7	6	-	8	6	8	-	9	7	-	9	5	-	7	8	-	5	4	-	71
1849	3	6	•	5		5	6	-	7	6	8	-	10	7	-	10	6	-	84	4	-	6		•	81
1850	3	0	-	5		5	0	•	6	6		-	9		-	10	6	-	8	5	•	6	5	-	7
1851	3	0	-	4	6	3	6	-	5	6	8	•	9}	6	-	8]	5	-	61	44	-	ы	6	-	6
18 52	3	6	-	5	6	5	0	-	7	6		•	9	6	-	9	5	~	71	3	-	5	5	•	8
1853	8	0	-	5	9	5	8	-	8	0	10	-	10	6	-	10	54	-	7	8	-	8	5	-	8
1854	3	0	-	4	6	5	0	•	6	3	101	•	11	6¥	-	11	151	-	84	4	•	6	5	-	8
18 55	4	0	-	6	9	5	6	-	9	3	1	aon	в.	8	_	111	7	-	9	5	-	7	1 7	-	10
1856	6	0	•	10	6	8	6	_	19	6	134	-	15	18	-	16	111	-	14	10	•	12	10	-	14
1857	16	0		10		8	0	-	10	6	12	-	13	10		124		_	11	6	-	8	6	•	101
1858	3	6	_	8	6	8			īš			-		10	-	14	7	-	ii	44	-	7	44	-	10
1859	5	ő	_	9		9			īž				18			144	81		19	1 51	-	81	1 6		11

	Dry East India		Buffalo Hides.		Newfoundland		
D-0	Kips. Firsts, Seconds and Thirds.	Calcutta.	Singapore and Penang.	Batavia.	Seal Skina, small.		
1847 1848 1849 1850 1851 1852 1853 1854 1856 1856 1857 1858	d. d. 8½ to 7 8 - 7 4½ - 7½ 4½ - 8 8½ - 7½ 8½ - 7½ 8½ - 7½ 8½ - 7½ 8½ - 7½ 8½ - 7½ 8½ - 10 8 - 11	d. d. 2 to 3 2 - 2 2 2 - 3 2 2 - 3 2 2 - 3 2 2 - 5 2 2 2 - 5 2 2 2 - 5 2 2 2 - 5 2 2 2 - 5 2 2 2 2	d. d. 2 2 2 3 2 2 3 2 2 3 2 2 3 2 2 3 2 2 3 2 2 3 2 3 2 3 2 3 2 3	d. d. s to 4 2 2 - 2 4 5 - 2 4 5 5 - 5 6 5 5 - 9 4 5 - 7 5 5 - 7 5	d. d. 24 to 36 27 - 36 42 - 44 42 - 44 48 - 39 30 - 33 43 - 44 46 - 48 59 - 56 54 - 56 45 - 51 51 - 52		

Prices of Market Hides, Calf Skins, and Horse Hides,—of Bark, and other Tarning Materials,—of Glue Pieces, Glue, Cod Oil, and Tallow, at the same Periods. (From Messrs. T. J. and T. Powell's Trade Circulars.)

		Market	Market	Bark	Foreig	n Bark.	
	Market Hides.	Calf Skins.	Horse Hides.	English. Per Load.	Flemiah. Per Ton.	German and Dutch. Per Ton.	Mimosa. Per Ton.
1855 1856 1857	d. d. 11 to 4 11 - 4 12 - 4 12 - 4 12 - 4 13 - 4 13 - 4 13 - 6 13 - 6 13 - 7 4 1 - 7	6 ·6 7 0 9 0	6 0 5 6 6 0 8 0 6 0 7 0 10 0	£ s. £ s. 10 0tol2 0	£ a. £ a. £ a. 6 0 6 0 5 0 - 7 0 0 5 10 - 8 0 5 10 - 6 10 5 10 - 6 10 5 10 - 6 10 5 10 - 6 10 5 10 - 6 10 5 10 - 6 10 5 10 - 6 10 5 10 - 8 10 5 10 - 8 10 5 10 - 8 10 5 10 - 8 10 5 10 - 8 10 5 10 - 8 10 5 10 - 8 10 5 10 - 8 10 5 10 - 8 10 5 10 - 8 10 5 10 - 8 10 5 10 - 8 10 5 10 - 8 10 5 10 - 8 10 5 10 - 8 10 5 10 - 8 10 5 10 - 8 10 5 10 - 8 10 5 10 5 10 5 10 5 10 5 10 5 10 5 10	E s. E s. 3 0 to 4 10 4 0 - 5 0 4 10 - 5 15 5 0 - 6 5 4 0 - 5 0 4 10 - 5 10 4 10 - 5 10 4 10 - 5 5 4 10 - 5 5 4 10 - 5 5	£ a. £ a. 7 0to 8 6 8 0-11 8 10 0-11 5 7 0-10 0 8 0-10 0 9 0-14 0

Dec	1	i i	- 1	Glue	Pieces.
Dec £ s	alonia. Gambier.	Cutch.	Dial Dial	Hide.	Sheep and
1847 11 0 tol 1848 7 0 - 1 1849 9 0 - 1 1850 12 0 - 1 1851 14 0 - 1 1852 11 0 - 1 1853 11 0 - 1	er Ton. Per Ton.	Per Ton.	Per Ton.	Per Ton.	Fleshings. Per Ton.
1855 11 0 - 1 1856 11 0 - 1 1857 10 0 - 1	0 - 14 0 8 10 - 9 0 0 - 13 10 10 0 - 10 10 0 - 15 10 13 10 - 14 0 0 - 16 0 17 0 - 18 0 0 - 16 10 24 0 - 25 0 0 - 16 10 25 0 - 25 10 0 - 16 0 17 0 - 18 0 0 - 16 0 17 0 - 18 0 0 - 15 0 15 0 - 16 10	14 0 - 16 0 15 0 - 16 10 1 19 0 - 20 0 17 0 - 18 0 22 0 - 23 0 55 0 - 56 0 25 0 - 32 0 25 0 - 27 0 15 0 - 55 0 25	8 0to — 8 0 - — 9 0 - 12 0 9 0 - 12 0 8 0 - 8 10 9 0 - 10 10 2 0 - 14 10 2 0 - 13 0	£ £ 14 to 28 14 - 25 14 - 25 14 - 28 16 - 35 18 - 45 24 - 54 22 - 50 30 - 60 30 - 63	2 a. 2 a. 7 0 tol 0 0 7 0 - 9 0 7 0 - 9 10 10 0 - 11 0 8 10 - 9 16 11 0 - 18 10 13 0 - 15 0 13 0 - 15 10 12 0 - 24 0 0 - 24 0

	Glue.	Cod Oil.		Ta	llow.	
D	Per Ton.	Per Tun.	Town. Per Cwt.	Russia. Per Cwt.	S. America. Per Cwt	Australian. Per Cwt.
Dec 1847 1848 1849 1850 1851 1852 1853 1854 1855 1856 1857	\$ & & & & & & & & & & & & & & & & & & &	\$. s. 97 0 23 10 31 0 40 0 33 0 34 0 37 0 43 10 49 0 52 10 35 0 31 10 31 10	£ s. d. 9 9 0 2 5 0 2 0 0 1 18 6 1 19 0 2 18 0 3 18 0 3 18 8 8 8 0 0 3 11 6 2 13 6	£ a. d. 2 6 6 2 5 0 1 18 6 1 17 6 1 18 0 2 7 6 3 5 0 3 9 6 2 19 6 2 10 6 2 17 6	2 a d. 2 6 0 0 1 16 6 1 18 0 0 1 18 0 2 15 6 2 15 6 2 11 6 9 11 6 9 17 6	£ a. d. 2 3 6 2 5 7 6 1 17 6 1 18 0 2 7 6 2 16 6 3 6 6 3 8 6 2 19 0 2 10 0 2 11 6

IMPORTS of HIDES and TANNING SUBSTANCES, &c. into the Port of London in the Years 1847 to 1859.

	River	River Plate.		Rio		Cape 8	Salted.			
	Dry.	Salted.	Grande Salted.	Brazil.	Coast of South America.	Hides.	Kips and Skins.	Austra- lian.	West Indian.	
1847	84,400	151,300	168,300	12,081	6.949	48,500	8,800	68,500	5,500	
1848	58,746	207,098	116,785	1,480	7,323	18,688	1,154	41,225	8,765	
1849	89,809	260,908	119,799	4,862	11,757	19,595	1,651	46,320	6,221	
1850	12,050	139,840	92,200	1,518	18,915	19,289	5,337	65,974	8,674	
1851	80,088	238 346	69.322	3,544	3,149	27,158	8,010	81,681	2,478	
1852	10,087	208,417	42,932	2,544	4,114	21,394	1.516	73,351	4.452	
· 1853	51,521	147 388	58,960	8,685	248	12,272	982	82,566	8,924	
1854	2,487	68,947	44,718	7,541	l I	17,844	2,293	75,000	6,149	
1855	1,402	146,696	38,660	8,698	5,206	58,345	14,566	78,738	5,700	
1856	116	103,220	33,442	7,663	2,913	191,608	86,819	109,700	4,809	
1857	8,525	162,258	41,884	10,472	15,487	104,810	40,925	137,417	6,161	
1858	10,783	122,289	81,746	10,815	42,760	77,016	29,233	175,591	7,494	
1859	1,990	193,675	37,167	6,554	17,912	83,781	10,018	257,421	5,195	

	1	Kips.			Buffalo	Hides.	
	East India.	Africa.	Peters- burgh.	Calcutta-	Singapore.	Manila.	Batavia.
1847	1,009,000	11,200	8,000	18,445	11,295	24,170	12,081
1848	873,346	12,521		4.512	8,273	9,891	8,660
1849	910,370	10,128	10,500	2,270	1.561	•••	13,470
1850	1,808,700	24,481	3,488	9,673	7,709	20,070	11,483
1851	1,980,000	18,506	2,050	12,761	28,064	14,575	15.361
1852	1,566,800	***	2,000	10,300	37,083	21,584	6,223
1853	1,762,790	•••	31,000	6,600	45,585	6,291	8,175
1854	2,127,350	•••	l	15,197	84,244	6.776	16,485
1855	2,268,380	•••		18.414	32,858	8,940	12,497
1856	1,970,070	•••	82,750	2,151	40,304	13,824	7,189
1857	8,184,300	2,950	171,710	18,250	56,644	12,400	14,796
1858	2,551,750	4.700	25,600	18,739	66,585	17.325	12,126
1859	2,813,200	16,728	13,200	32,000	50,131	2,850	22,100

	South	Newfound- land and		Ton	us of	
į	American Horse Hides.	Greenland Seal Skins.	Oak Bark.	Mimosa.	Valonia.	Terra Japon.
1847	104,000	290,000	1600	600	1760	4809
1848	111,380	191,760	1838	130	2643	4000
1819	108,584	103,475	2135	219	4226	4924
1850	89,083	834.020	1320	883	2395	2782
1851	59,051	264.078	1365	1608	1650	2812
1852	61,519	264.390	1670	1723	2735	2460
1853	181,110	262,560	1194	258	8700	8004
1854	114,906	175,640	1609	22	8400	1550
1855	110,470	126,271	1561	616	1445	8500
1856	93,610	168,750	1518	686	5900	8900
1857	93,712	205,139	1214	1224	5220	8690
1858	101,828	212,100	1824	615	5770	4500
1859	119,518	169,561	1964	1049	6980	5000

If we take the last year's imports of tanning substances at the current prices of the day, and add thereto the estimate of the indigenous barks, we shall arrive at an approximate idea of this important branch of the leather trade.

		Dor	ORTS of 1	859.				
Oak bark, 19,980 tons Mimosa bark, 1049 tons Valonia, 25,579 tons Sumach, 14,044 tons Gambier, 9247 tons Cutch, 4515 tons Myrabolans, Divi Divi,	and otl	her subst	ances, abou	: : : : : 4000 ton		at at at at at	£7 9 18 14 16 27	£139,869 9,423 382,527 196,616 147,951 121,806 £0,009
The indigenous Oak ba Larch bark used in Sco	rk used tland, p	may be probably	taken at fu 50,000 team	11y 200,000	ton	a at at	:	1,800,600 250,600

LIGHT DUES. The following were the receipts from light dues throughout the United Kingdom, 1858 to 1858 inclusive:—1853,£413,191; 1854,£316,091; 1855,£313,228; 1856,£353,808; 1857,£311,820; 1858,£292,161. The ordinary expenditure in 1853 was £190,018; in 1854,£195,619; in 1855,£214,701; in 1856,£208,006; in 1857,£232,561; and in 1858,£202,108. The extraordinary expenditure during these six years amounted to £335,500. Within the last five years reductions in the sums paid for light dues have been effected to the amount of £200,341, under the following heads:—35 per cent. off dues on coasting voyages and 50 per cent. off dues on foreign voyages, so that a shipowner in the coasting trade who before the year 1854 paid £100 for lights now pays only £65, and a shipowner in the foreign trade who before 1854 paid £100, now only pays £50. This is total exclusive of the reduction of 75 per cent. allowed in 1854 off the Scotch lights for coasting vessels, and the small reductions off Irish lights allowed in 1855. The total amount of expenditure, ordinary and extraordinary, for the maintenance of light-houses and the building of new lighthouses during the year 1858 was £278,557. The estimates for future years are £235,000 for the maintenance of lighthouses, including those recently built or now building; and £300,000, as extraordinary expenditure for building new lighthouses, to be spread over several years. The balance at present to the account of the Mercantile Marine Fund, who manage the lighthouses, is £361,645, exclusive of the floating balances in the hands of numerous sub-accountants.

LINEN. Under the head of FLAX some details have already been given respecting the linen manufactures of the Kingdom. According to the latest official returns, the number of factories working on flax, are as follows:—In Lancashire and Cheshire, 13; in Yorkshire, 60; in Derby, 1; other parts of England, 65. In Scotland, 168, and in Ireland, 110. These employ 21,977 male hands, and 53,909 females. The motive horse power in these factories was 18,322, of which 14,887 was steam power, and 3935 water power. In Leeds there are 32 firms engaged in flax manufacture, employing 1818 nominal horse power, and 9020 operatives, and consuming about 12,000 tons of flax.

The number of spindles are as follows:—In Ireland, 567,980; in England and Wales, 441,759; and in Scotland, 278,304. In 1850 the quantity of linen and yarn, &c. exported was in value £4,845,030, and the quantity kept for home consumption was valued at £9,700,000, together £14,545,030. In 1859 the exports were to the value of £6,291,734, and taking the home consumption at double this quantity, it gives a total value for the trade of £18,875,202.

The table on the next page continues down the annual returns of the export trade from p. 449.

	1	THAM MEHL	PACTURES	Exported.		LIMM YARN EXPORTED.				
Years.	Entered by	the Yard.	Small	Total	Exports to		Total	Exports		
1	Quantity.	Value.			U. States.	Quantity.	Value.	to France.		
	Yarda.	£.	£.	£.	£.	Lbs.	£.	£.		
1841	90,321,761	8,200,467	147,088	8,847,555	1,231,748	25,220,290	972,466	806,336		
1842	69,232,682	2,217,373	129,376	2,346,749	463,038	24,490,987	1.025,551	749,675		
1843	84,172,585	2,615,566	187,657	2,803,223	713,577	23,358,352		482,357		
1844	91,283,754	2,801,609	223,191	8,094,800	987,200	25,970,569		501,241		
1845		2,830,734	205,586	3,036,370	908,709	23,288,725				
1846		2,631,809	198,999	2.830,808	852,720	19,484,203				
1847			199,757	2,958,851	1,111,108	12,688,915				
1848		2,597,578	205,216	2,802,789	919,957	11,722,182				
	111,259,183		284,290	3,493,829	1,298,357	17,264,083				
	122,342,516	3,589,439	858,243	3,947,682	1.654,286	18,220,688				
	129, 106, 753		284,461	4,107,396	1 433,733	18,841,326				
	133,192.627	3,872,491	359,295	4,231,786	315,847	23,928,592				
	134,743,914		402,319	4,762,645	2,057,119	22,893,586				
	111,941,220	3,784,508	826,314	4,110,822	1,668,982	17,696,567				
	118,258,229	3,811,234	809,135	4,120,372	1,666,038	18,177,484				
	146,410,188		422,536	4,887,780	2,154,490	25, 118, 349				
	133,839,593		840,126	4,516,880	1,425,156	28,847,811				
	121,960,291	3,793,690	330,666	4,124,356	1,344,634	82,047,492				
1859	138,197,801	4,302,899	804,346	4,607,245	1,989,823	27,287,917	1,684,489	1		

The imports of all kinds of oil seeds have largely increased of late years, and more especially of linseed. from the East Indies as we do from Russia. We now receive nearly as much

In 1853 only 608,984 quarters were imported. In 1859 twice this quantity was received from the following sources:—Russia, 665,887 quarters; Prussia, 37,622 quarters; British East Indies. 526,566 quarters; and from other countries, 41.336 quarters. Total, 1,270,911 quarters.

LIOYDS. In the new buildings of the upper story of the north-east wing of

the Royal Exchange, the operations and conveniences of this marine institution have been very greatly extended. The Underwriters' room and the Subscription reading-room are both roomy and admirably fitted. 'Lloyds' List,' published every evening under the direction of the Secretary and Committee, gives the

shipping movements of the day from the special reports received from the So

ciety's numerous agents by post or electric telegraph.

LLOYDS' REGISTER OF BRITISH AND FOREIGN SHIPPING.

The affairs of the Society are under the direction of a Committee in London of the analysis of the Society are inter the threaton of a Committee in London of a twenty-four members, consisting of an equal proportion of merchants, ship-owners, and underwriters. The Chairman for managing the affairs of Lloyds, the Chairman of the General Shipowners' Society, the Chairman and Deputy-chairman of the Liverpool Committee, and the Chairman of the Rotation Committee for the time being are as affair on members of the Committee. The definitions of classification given at page 454 hold good, except that the second description of first-class ships are now designated by A in red.

Second-class ships are distinguished by the diphthong Æ, and consist of ships

which are found on survey fit for the safe conveyance of dry and perishable goods on shorter voyages. No ship has been surveyed for the Æ character since 1st Oct. 1857, but ships classed with this character are allowed to retain the same, subject to annual survey, until the expiration of the period for which they were specially surveyed. The number of ships standing on the register books in different classes at two recent periods were:-

A in red		-	6012 11 843 1307 45	6119 384 403 1145	Brought over I With no character as- signed	8218 4 2730	8103 1 8066
G	urried over	•	8218	8103	Total .	10,952	11,190

The following fees are charged to the owners of ships prior to their vessels being classed and registered in the book.

For Entering and Classing Ships, and for Entering and Classing Ships surveyed for Continuation, or repaired for Restoration.

For each Ship Ditto Ditto Ditto Ditto	of 100 tons and under 200 " 800 " 400 and upwards For Register	100 tons 200 300 400 ing Repair	: : :	:	£1 2 8 4 5	0000	0000	
For each Ship Ditto Ditto	of 800 tons and under	800 tons 500 1000	:	:	£0 1 2	10 0 0	0000	

For Re-classing Ships (except when repaired) the Characters of which have been expunged, or change of Owners.

200 tons . 200 — and above For each Ship under

For special surveys, and where the Surveyors to the Society are required by the owners to superintend the building of ships, or repairs for restoration, or otherwise, a charge will be made according to the nature and extent of the service performed. In all such cases the authority of the Committee is required.

Certificates of character, signed by the Chairman of the General Committee, or by the Chairman of the Sub-Committee of Classification, and countersigned by the Secretary, are granted upon application; the charge for which is as fol-

2s 6d each

LUBECK. The area of this Hanse Town is 82,824 acres, and the population in 1853 was 54,166 souls, of which 26,098 were the city. The revenue in 1855 was £58,877, and the expenditure £68,500. The vessels that entered numbered 972, measuring 110,742 tons. The imports were to the value of £3,744,281.

of which only £1,054,366 were by sea.

MACE. In 1830 the duty was 3s 6d per lb. on British, and 4s 6d on foreign, and the consumption was 12,600 lbs. In 1835 it had increased to 18,835 lbs. The duty was then fixed at 2,6d for all descriptions, and in 1852 the consumption was 21,485 lbs. In the following year the duty was reduced to 1s per lb., and the consumption in 1859 was 34,714 lbs.

MACKEREL. The excitement on the Devonshire coast when the shoals of mackerel come is very great. On their periodical arrivals on the coast, which is their custom in multitudes, for the purpose of feeding on a small fry very similar to whitebait, a practised eye will readily observe their manœuvres some distance from the shore, inasmuch as the moment they discover the food they love so well, their numbers and greedy propensities cause them to rush on their prey, which, endeavouring to escape from death, disturbs the water in large circles like a shower of hailstones dropping therein; indeed we know of nothing more similar to compare it to. The moment one of these disturbed spots appears on the water, men are placed on the highest cliffs to look out, while the boats with their crews and nets prepared are launched and ready for action. The mackerel are sometimes seen at least a mile from shore, but the moment they attack the small bait, the latter fly towards the beach, till at times they approach within a hundred yards or nearer, and then while the look-out man, who discovers them more readily from an eminence, shouts at the extent of his lungs, the boats are rapidly rowed around the feasting fish in a circle, and then being hauled towards the shore by men on land, some thousands of mackerel are enclosed in a large bag at the extremity of the net.

On the North American coast a very extensive trade is carried on in pickled

mackerel. Every little creek and bay from Cape Sable to Halifax in Nova Scotia occasionally overflows with this fish, and they are taken in nets, from 100 to 600 barrels being secured at a single draught. Men, women and children are then employed night and day in curing them. The mackerel fishing of Nova Scotia furnishes one of its largest exports. In 1850 no less than 96,650 barrels of mackerel were exported from the port of Halifax alone, valued at £120,815, and in 1851 36,000 barrels went to the United States. In 1852 the value of the mackerel shipped from the province was £101,000.

There is about 60,000 tons of American boats engaged in the mackerel fishing, chiefly from the States of Massachusetts and Maine, and employing 10,000 men. The quantity of mackerel taken in 1851 by the Massachusetts boats was about 343,000 barrels, valued at £473,100. Nearly half of the quantity was caught in the Bay of Chalcur and other large bays on the coasts of the British

provinces.

The quantity officially inspected in the State of Massachusetts was as follows:

1881	•	-	-	-	•	-	388,559 barro
1841	-	•	-	•	-	-	55,537
1851	-	•	•	•	•	-	829,278
1056							014 010

The mackerel are classed into four grades; the third and fourth quality being worth only half the value of No. 1, which may range from 35s to 44s per barrel. MADDER. With the progress of our textile manufactures the imports of this dye-stuff have largely increased, as will be seen by the following return:

	Madder.	Madder Root.	Total.
	Cwt.	Cwt.	Cwt.
1841	105,981	104,671	210,652
1843	86,882	82,879	169,261
1843	138.633	101,404	240,037
1844	96,084	95,970	190,054
1845	67,456	147,591	215,047
1 84 6	87,246	133,661	220,907
1847	67,855	103,825	171,180
1848	81,261	139,463	220,724
1849	92,736	161,986	254,722
1850	100,223	161,637	261,860
1851	_ 92,925	202,091	295,016
1852	84,385	179,812	264, 197
1853	111,563	215,017	826,580
1854	102,723	183,666	286,389
1855	100,251	175,046	275,297
1856	121,666	199,750	821,416
1857	109,069	293,989	408,058
1858	64,910	256,670	821,580
1859	· -	1 - 1	355,662

Of the imports in 1858 the greater portion of the madder root, 158,000 cwts, came from Turkey and Syria, 55,198 cwts. from the Two Sicilies, and 25,857 cwts. from India, with which is included some portion of munject.

Of the ground madder 461,593 cwts. came from France, 15,832 cwts. from Holland, and the rest chiefly from Spain and Sicily. The average price ranged from £2. 5s to £2. 12s per cwt.

Under the name of garancins a large quantity of powdered madder root, or a substance obtained by sulphuric acid from it, is imported, chiefly from Holland and France. The weights were in

				Cwt.					Cwt
1853	-	-	•	22,426	1856	-	•	~	25,342
1854	-	•	-	17,594	1857	•	-	-	80,998
1855	-	-	-	27,068	1858	•	-	-	42,700

This garancine is worth more than double the price of madder, being valued at \pounds 7. per cwt. The aggregate importance of this dye-stuff is seen in the im-

mense quantity now purchased for the use of our manufacturers. The total value of the imports in 1858 was—madder, £159,756; madder root, £590,861, and garancine, £299,027; total, £1,049,644.

MADEIRA. The population of this island has rather decreased than increased of late years, owing to extensive emigration. In 1855 upwards of 2300 persons left the island, about three-fourths of whom went to Demersara and the British West Indies, and the remainder to Brazil. In 1856 the population was 103,097. There are no statistics approaching to accuracy of the wine, grain or other agricultural produce of the island; but while the vintages since 1852 have been nearly total failures, and the small quantity of wine produced during each year unsound and comparatively valueless, it is quite certain that the cultivation of grain and food of various kinds has been annually greatly extended. The harvest of 1854 produced upwards of 20,000 quarters, more than half being wheat. The sugar-cane has been planted to a considerable extent, and so has the cactus on which the cochineal insect is propagated, and hopes are enter-tained that both cochineal and sugar, particularly the former, may ultimately become important articles of export. Hitherto the juice expressed from the sugar-cane has been by distillation, converted into a spirit, and consumed on the

The cultivation of the sweet potatoe has been also greatly increased since the vines have become unproductive. The exportation of fruit to England continues to increase, and is encouraged by the rapidity of transport afforded by the contract steam-packets from Brazil and Africa calling there on their voyages house. The aggregate value of the imports and exports have, however, gradually declined. The imports in 1852 were valued at £154,290, and in 1856 at £118,950; the exports in 1852 at £127,470, and in 1856 at £77,150.

The number of vessels that entered Funchal in 1856 was 172, of 35,211 tons. The imports of grain and flour are much smaller from the greater attention given to agriculture. The shipments of wine, which in 1852 were 6690 pipes, were only 1891 pipes in 1856. The Customs revenue of the island in the year

ending 30th June, 1855, was £13,879.

MAHOGANY. Thirty years ago the imports of this farniture wood only averaged about 12,000 tons a year, now they exceed 37,000 tons. Of the imports in 1858, 16,310 tons came from British Honduras, 651? tons from Mexico, 4132 from Cuba, and 3373 from Hayti. The yearly average quantity of mahogany exported in the past ten years from Belize was about eight million feet, equal to 20,000 tons, or 200,000 tons in the ten years, requiring 160,000 trees to furnish it.

MAIZE. Indian corn (Zea Mays) has been long the staple and peculiar food crop or bread-stuff of the United States, although wheat is now largely competing with it there. Whenever Europe is short of food, North America competing with it there. Whenever Europe is short of lovel, North America stands ready to supply the deficiency with the excess of her corn crop, the superabundance of which she is obliged at present to convert into whiskey, or to fatten swine and live stock on. It is the plant of the United States; and the clive branch might with propriety be taken from the claw of their national eagle,

and the Indian corn plant established in its place.

The importance and value of Indian corn in tropical and semi-tropical countries are too well known to need illustration. On almost every part of the globe where the hand of civilization has broken the turf, this beautiful grain receives a large share of attention. In the western continent it is raised from Canada to Patagonia, and the islands of the South Seas, through almost every variety of climate and people, and over an extent from north to south of more than 7000 miles. It was introduced into Africa by the Portuguese in the sixteenth century, and is cultivated more or less from the Mediterranean Sea and the Libyan Desert to the Cape of Good Hope. In Java and the Asiatic Isles it forms an important product. In Central Asia it is known and valued, as well as in Australia and the islands of the Indian Ocean. In Europe it is extensively produced; in Hungary, in Lombardy, in France, and in Spain, and we might almost say, from the Ural Chain to the Atlantic. No grain could secure such favour

from all parts of the world, except from its intrinsic value. No other cereal, in fact, except rice, is so extensively cultivated. Its flexibility of organization makes it very easy of adaptation to climate and soil. Though it prefers moist and rich soils, with strong heat, there are varieties of it which can be raised in climates at a height of more than 9000 feet above the level of the sea. The warmest regions of the torrid zone produce maize in abundance, where three crops can be taken in a year, while the short summers of Canada have a variety adapted to them. This cannot be said of rice, which requires great heat, and cannot endure a climate of high latitude. Indian corn ripens at a time when most other grains have been harvested; it therefore furnishes employment when there would naturally be but little else to do. But what gives to Indian corn its greatest importance is the actual amount of nutritive matter which it contains. It is said to be third in this respect, wheat and rice containing a somewhat greater amount; though many place maize second only to wheat. However much it may be raised in small patches for local consumption in other countries, it is in the United States alone that it enters largely and systematically into cultivation. In 1840 the quantity raised in the States was about 377,582,000 hushels; in 1850, nearly 600,000,000 bushels; and the produce of 1860 will probably be, at the same rate of increase, about 900,000,000 bushels.

There is no species of cereal which manifests itself under such various forms, size, colour, and chemical constituents as Indian corn. Varieties are met with exhibiting every grade, size, colour, and conformation between the shrubby vent exhibiting every grade, size, colour, and conformation between the shribby reed that grows on the shores of Lake Superior to the gigantic state of the Ohio Valley; the tiny ears, with flat, clear, clinging grains of Canada, the brilliant, rounded little pearl, or the bright red grains and white cob of the eight-rowed hematite, to the swelling ears of the big white and yellow round seed of the Southern States. Two or three million quarters of Indian corn are already shipped annually to different quarters from American ports. The general introduction of Indian corn and meal since the Irish famine year has overcome most of the prejudices formerly entertained in the United Kingdom; and the consumption here now averages about 1,500,000 quarters of the grain, and several

thousand hundred weight of the meal.

The imports of Indian corn into the United Kingdom in the past fourteen years have been as follows:-

				Quarters	ſ				Quarters.
1846				694,184	1853				1.554.434
1847	•			8.614.637	1854				1,357,375
1848		-		1.577,023	1855				1,218,276
1849	-	_	1	2,189,164	1856				1,777,813
1850		•		1,286,263	1857		•		1,150,783
1851	-			1,821,578	1858				1.750,825
1852		•	-	1.479.890	1859	_	-	- 1	1.314.303

Of Indian corn meal, we have received and taken for consumption in the last four years-

> 1858 1859 1856 1857

MALT.-Under the article BEER, in the Supplement, some statistics of the consumption of malt have already been given.

In England and Wales in 1857 there were 6285 maltsters, paying a license duty of from 2s 7\frac{1}{2}d to £4 14s 6d per annum; 11 roasters of malt, paying £20 per annum; and 21 dealers in malt, paying £10 per annum. The duty derived from all these was £15,338. In Scotland there were 653 maltsters, 2 roasters, and I dealer; and the duty received from these licenses was £1,124. In Ireland, 158 maltsters, 9 roasters, and I dealer, paying a collective duty of £740. There were, therefore, 7091 persons makers of or dealers in malt. The reduction in numbers of late years is very noticeable, for in 1847 there were 9578 maltsters, distributed as follows:—8290 in England, 1098 in Scotland, and 190 in Ireland.

On the 14th of August, 1855, malt was permitted to be made free of duty for distilling purposes and for exportation. The quantity made under this privilege

since has averaged rather more than 5,000,000 bushels per annum, the great bulk of which is made and used in Scotland. The estimated quantity of malt used for the beer exported in the three years ending 1859 averaged 1,200,000 bushels per annum. Calculating the malt charged with duty at 48,000,000 bushels per annum, and the population at 29,000,000, we have a consumption of about 1½ bushels of malt for each, and the net revenue yielded £5,400,000, gives a proportion paid per head of 3s 8d.

In the year ended 31st of March, 1860, a larger quantity of malt was brought to charge than in any year since the duty was imposed, now 163 years ago, having reached 44,565,038 bushels. The increase in the quantity of malt made has been progressive since 1855; and it is the more remarkable, as since that year the account has been diminished by about 3,000,000 bushels used by distillers. This satisfactory growth of the revenue derived from malt is no doubt chiefly due to the uniformly prosperous condition of the country for several years past; but there are other causes which have greatly assisted in this development of the malt trade. The increase in the spirit duties in Scotland and Ireland is well known to have caused a considerable augmentation in the consumption of beer in those countries, while the free importation of foreign barley, and the improved quality of that article, have enabled maltsters to meet the demands of the brewers. Fully two-thirds of our barley crop is used for malting, but our imports of foreign barley are about 1,700,000 quarters yearly. The average price of barley in England and Wales was, in

			s. d.	i				8.	đ.	
1815	•		81 2	1840				36	5	
1820			84 11	1845				31	8	
1825			40 1	1850		_		23	5	
1830	-		32 7	1855	•			84	9	
1885		-	29 11	1858		-	:	34	8	

Out of 4,866,402 quarters of malt made in the United Kingdom in the year ended 30th of September, 1859, 3,541,766 were made by wholesale brewers, 914,538 by victuallers, and 410,098 by retail brewers.

The following table continues down the statistics given at page 462, and shows the quantity of malt charged with duty and the amount of revenue received thereon in various years since 1840, in the different divisions of the kingdom:—

Years.	England.	Scotland.	Ireland.	Total.	Amount of Duty.
1841	Bushels. 30,956,348	Bushels. 4.058.246	Bushela. 1,149,691	Bushels. 86,164,285	£. 4.889.237
1845	30,508,942	4,858,036	1,684,110	36,546,088	4,937,972
1850 1855	84,423,489 80,576,594	4,639,150 8,192,091	1,682,102 1,489,923	40,744,750 35,208,608	6,511,441 6,847,104
1859	40,953,190	1,575,505	2,237,348	44,766,043	6,852,458

In 1854 the duty on malt made from barley was increased in consequence of the war from 2s 7d, and 5 per cent. to 4s per bushel, and that made from bere or bigg from 2s, and 5 per cent. to 3s 1d per bushel, commencing May 8. On the 5th of July, 1856, the war duty was repealed, viz. on malt from barley 1s 3½d per bushel, and from bere or bigg 1s 1d per bushel.

bushel, and from here or bigg 1s 1d per bushel.

MALTA.—The population of this island was in 1842, 114,499, and in 1857, 140,303, of whom 131,262 were Maltese, 1111 British residents, 1084 foreigners, and 6146 military. The area, including the island of Gozo, is 115 sonare miles.

and 6146 military. The area, including the island of Gozo, is 115 square miles.

Though properly speaking this island is little better than a barren rock, it has become by the perseverance and industry of the inhabitants, as far as the nature of the soil will admit, an exceedingly fertile and well-cultivated district. The cultivated land in the whole island is estimated at 40,000 acres.

The revenue of the island now averages about £135,000. There are about

The revenue of the island now averages about £135,000. There are about 190 vessels owned in Malta, measuring in the aggregate 31,500 tons. The exports in 1857 were valued at 1,850,872, and the imports at £2,361,046. Malta is the principal place of arrival and departure for steamers in the Mediterranean;

British, French, &c., with mails and passengers for India, Constantinople, &c. Of 2856 vessels, registering 432,996 tons, which entered the port in 1857, 879 vessels and 153,809 tons were British.

MARBLE.—There are marble quarries in Somersetshire, Kent, Sussex, Derby and Wales. Ireland is exceedingly rich in some varieties of marble, and of these the black marbles of Kilkenny and Galway and the green kinds from Connamera are well known and much exported. The quarries from which these are obtained are considered capable of almost indefinite extension.

In Derbyshire there are three quarries near Matlock from which about 20,000 cubic feet of marble are annually obtained, and the Ashford Quarry, belonging to the Duke of Devonshire, furnishes about 500 tons of black marble. This is to the Duke of Devonshire, furnishes about 500 tons of black marble. the finest known, both for colour and texture. It lies in beds of from half-aninch to ten inches in thickness, and the demand for it would be very great, but unfortunately it is extremely subject to veins of white calcareous spar and shakes, which render it difficult to procure in large sizes of pure black.

Marble is imported from Sardinia, Italy, France and Belgium, in blocks and slabs for working into statuary and ornamental purposes. The following figures show the quantity imported of late years:

		Sawn, &c.								
1853	-		_	_	Cwts. 74,972	_	_	_	_	6.661
1854			-	_	113,950	-		-	-	18,265
1855	-		-	-	103,859	-	-	-	_	12,048
1856	•	-	-	-	68,345	-	-	•	-	17,509
1857	-	-	-	-	95,751	-	-	-	-	20,965
1050					01 107					00 400

Manufactured marble has been admitted duty free since 1st June, 1853.

MARKETS.—Smithfield market was abolished on the 11th June, 1855, after existing for about 800 years, and the great Metropolitan cattle market transferred to a new site in Copenhagen Fields, Islington, was opened on the 13th June by the Prince Consort. The new market forms a square area, paved throughout with granite, surrounded by a handsome railing with gates ornamented with a lofty clock-tower in the centre, and provided with an abundant supply of water. It covers about 15 acres, while the lairs, &c., absorb about as

much more, and an ample surplus (of 35 acres) is left for future contingencies.

Under the head of CATTLE TRADE some particulars have already been given of the live stock slaughtered. The sales at Smithfield in 1854 amounted to

263,008 cattle and 1,539,380 sheep.

The great market-day before Christmas serves as a good criterion of the consumption and ruling prices of meat in the metropolis; and the following were the average prices per stone of 8 lbs. and the number of live stock exhibited in two different years—all the stock shown are not usually sold:

MONDAY, DECEMBER 17, 1849.

Beef Mutton Veal Pork	:	:	:	8 8 3	_	to to to	2444	d 6 6 0 0		Beasts Sheep Calves Pigs	:	:	:	:	:	Number. 5,765 24,000 180 230
				M	ONI	DAT	r, I	E	JE.	MBER 11	, 18	54.				
Beef	-	-	-	8	6	to	5	4	-1	Beasts	-	_	-	-	-	6.181
Mutton	-	-	~	4	3	to	5	4	-1	Sheep	-	-	-	-	-	22,822
Veal	•	-	-	4	6	to	5	8	- 1	Calves	-	-	-	-	-	106
Pork	-	-	•	8	6	to	4	8	1	Pigs	-	•	•	-	-	288

There has been an increasing tendency of late years to send up to London country-killed meat, and hence the dead markets of Newgate, Leadenhall, Whitechapel and other localities, do a more increased amount of business. The

quantity brought into London yearly has been variously estimated at from 40,000 to 67,500 tons.

Billingsgate fish market has been rebuilt and much enlarged and improved. There are also public markets in Farringdon Street and near Hungerford Bridge.

The new Coal Exchange was opened in Lower Thames Street by the Prince

Consort, Oct. 30, 1849.

MAURITIUS.—The population of this island in 1857 was 238,363, of whom 156,851 were males and 811,512 females. Of the aggregate population 142.534 were Indian emigrants introduced to cultivate sugar, &c., very many of whom ultimately settle in the island. Of the Indian population 53,243 were engaged in agriculture and 24,048 in trade and commerce.

The progress of the island has been steadily onward for some years past, and it has within itself all the necessary elements for making cheap sugar, in a rich soil, the best of machinery and materials for manufacture, and an abundant

supply of labour.

So far from the opinion expressed at page 468 being confirmed, that sugar cultivation had attained its maximum, the exports have more than trebled, and in the three years ending 1857 the average shipments of sugar were 2,209,000 cwts. and of rum 273,000 gallons. The imports comprise chiefly grain and live stock, and were to the value of £72,000; machinery and mill-work to the value of £76,000, guano 5000 or 6000 tons, and specie. The shipping trade has largely increased, as will be seen by the following statistics of entries:

	British Vessels	Tonnage.	Foreign Vessels.	Tonnage.
1942	889	90,616	50	12,371
1850	888	114,608	82	21,669
1857	468	182,278	260	89,716

The revenue of the colony has increased to about £400,000.

MERCHANT SHIPPING ACT, 1854. This Act, the 17 and 18 Vict. c. 104, which commenced May 1, 1855, comprises all the laws affecting British Merchant Shipping, with the exception of the laws relating to the public revenue, to emigrant passengers, and those that exclusively refer to East India ships. It is chiefly a consolidation of former statutes, abstracts of many of which have been given in the body of the present work; but the alteration of details and the additions are numerous and important. As the extreme bulk of the Act, consisting of 548 sections, besides a large mass of forms and tables, renders an intelligible abridgment hardly practicable, all we shall attempt is to indicate some of the leading changes introduced.

The Act is divided into eleven parts. The first part relates to the Board of

The Act is divided into eleven parts. The first part relates to the Board of Trade, its functions in superintending merchant shipping and seamen. In this division there is nothing new except the extension of existing provisions, making documents issued by the Board receivable as legal evidence. Important alterations are in Part two, referring to the tonnage, measurement and registry of ships. The chief points of difference between the new and former mode of measurement are, that the number of measurements taken is much greater, and increases with the size of the ship; and the results, or cubical contents, are determined by what is known as Stirling's rule. Provision is also made for measuring the space between decks, as well as all covered space available for carrying passengers or cargo; the forecastle used by the crew being excepted, unless it exceed one-twentieth of the tonnage of the ship, the excess only being added. In regard to steam-ships, specified deductions are made for machinery, &c. The register tonnage and number of certificate of registry are to be carred, or otherwise permanently marked, on the main beam of all British ships. But the Act does not make it compulsory to adopt the new measurement in regard to ships already registered.

Considerable changes are introduced in reference to ownership and registry of ships. The repeal of the Navigation Laws has rendered the old stringent rules of registry unnecessary; provision being made for simply ascertaining the nationality of the ship, for subjecting her to municipal laws, and for preventing a

fraudulent assumption of the national flag. Greater facilities are also afforded for the transfer of ships by the registered owners, who are empowered (Section 76) to dispose of their ships, by way of mortgage or sale, at any place out of the country or possession in which the port of registry is situate; for which purpose certificates are to be granted by the Registrar.

Part 3, which relates to masters and seamen, forms a considerable portion of the Act, extending, as it does, over 180 clauses. It moreover contains many important alterations of the former Acts, and much additional matter. Power is given to the Board of Trade to inquire into the misconduct of and to remove shipping-masters. The fees paid to the shipping-offices, on ships under 100 tons, are slightly reduced, and on those above 1000 tons slightly raised. Examination and certificates of masters and mates are extended to all home-trade ships employed in carrying passengers (section 131)—but every person who, before the 1st day of January, 1854, has served as master of a home-trade passenger ship (section 135), will be entitled to a certificate of service as master of home-trade passenger ships; and a similar rule applies to mates. No certificate of a home-trade passenger ship will entitle the holder to go to sea as master or mate of a foreign going ship. All indentures of apprenticeship (sect. 143) are to be exempt from stamp duty; and all apprentices are to appear before the shipping-master, to whom also the indentures are to be produced: in de-

fault of which the shipmaster will incur a penalty not exceeding £5.

In the engagement and supply of seamen the Board of Trade retains the power of granting licenses to such persons as it may think fit; but any persons (sect. 147) who are bond fids the servants and in the constant employ of the owner, may also provide seamen for his ships. The agreement to be made with seamen (sect. 149), which must be in form sanctioned by the Board, is to contain certain particulars with regard to the nature and probable duration of the voyage, number and description of the crew, the capacity in which the seamen are to serve, &c. The engagement of seamen in the colonies and in foreign countries (sections 159-60) is assimilated to the practice in the United Kingdom (except in regard to colonial ships when in their own colony); such seamen, in foreign ports, are to be engaged before a British Consular officer.

With respect to the wages of seamen, advance notes are to be no longer recognised. Power is given to relatives to sue on allotment notes, either in the County Court, or in a summary manner. Facilities are to be afforded by the Board of Trade (section 177) to remit, through Money-orders issued by shippingmasters, the wages of seamen and apprentices, to their friends. Savings'-banks for seamen may be established in such ports within the United Kingdom, either in shipping-offices or elsewhere, as may appear expedient to the Board. Freight as the "mother of wages," no longer exists (section 183). In all cases of wreck, unless proof be adduced that he has not exerted himself, the seamen will, like any other hired servant, be entitled to wages for the services actually rendered. But if, through wreck or other casualty, the service terminate before the period contemplated in the agreement, he is only to be entitled to wages for the time of service prior to such termination. The power of recovering wages summarily is extended from £20 to £50. The master has also the same remedy (section 191); power being given to any Admiralty Court to determine any question of account which may be raised. Provision is made (section 192), in the event of the relatives of seamen becoming chargeable to the parish, that the charge shall be reimbursed out of the wages of such seamen. In the event of seamen or apprentices being discharged abroad by sale of ship or otherwise (section 205), certificates of discharge are to be given, and the men are to be sent home at the expense of the owner.

In regard to provisions and health on board ship, a shipmaster subjects himself (section 221) to a fine of £20. on omitting to provide proper provisions and water. The result of any official examination in the matter must be entered in the log. But seamen making groundless complaints are to be liable to forfeit a sum not exceeding a week's wages. In case the stipulated allowance of pro-

visions be reduced, or of bad quality, without the supply of equivalent substitutes, the Act provides compensation to seamen for such privation, of from 4d The expenses attending illness (through injury received in the to le per day. service of the ship) of masters, seamen, or apprentices, or burial in the event of death (section 228), are to be paid by the owner without any deduction from the wages due. As, also, is the expense of medicine and attendance otherwise given whilst on board. In the event of their removal from the ship through illness (if they afterwards return to their duty), the cost of removal, medical attendance, and subsistence, is also to be defrayed by the owner. In all other cases any "reasonable expense" incurred by the owner in respect to the illness of seamen, and in respect to the burial of any seaman or apprentice who may die in the service, is to be deducted from their wages. Every foreign-going ship having 100 persons on board is bound to carry a surgeon (section 230), under a penalty of £100, for every voyage. Provision is made that every seaman or apprentice sleeping in a hammock shall have a space of not less than nine superficial feet, or 54 cubic feet, and if not in hammocks, not less than 12 feet, or 72 cubic feet;

and the space must be kept free from stores or goods of any kind.

In the event of seamen volunteering in the Navy, and it becomes necessary to engage substitutes for the merchant ship they have left, the owners may apply to the Admiralty Court for repayment of any extra expenses thus incurred. It is also provided (section 216) that the owner shall be repaid any advance made, if not duly earned, to seamen so entering the Navy. There is (section 257) a penalty of £10 on any one for enticing seamen or apprentices to desert, and £20 for harbouring deserters.

Power is given (section 240) to any Court having Admiralty jurisdiction in any of her Majesty's dominions to remove the master of a ship and appoint another, upon application of the owner, consignee, agent, mate, one-third or more of the crew. On a shipmaster being superseded during a voyage (section 259), and succeeded in command by another person, he will incur a penalty not exceeding £20, in default of delivering to his successor the various documents relating to the navigation of the ship.

The official logs (section 282) are to contain, besides the usual entries, particulars of births, deaths, and marriages happening on board; the amount of wages due to any seaman who may enter the Navy, or who dies during the voyage; also the circumstances attending collisions, when they occur. All entries in the Log-book, duly made, are to be received in evidence, subject to all just

exceptions.

In respect to Steam Navigation, the Act provides, that foreign steam ships, carrying passengers between places in the United Kingdom (section 291), are to be subject to the same rules as British steamships. The scale of boats to be carried is slightly modified, so as to meet the requirements of different vessels. A penalty, not exceeding £100, in addition to any other liabilities (section 302), is incurred by any person placing an undue weight on the safety-valve of any steam ship. The survey of passenger ships is made to extend to all steamers carrying any persons whomsoever, except the master and the crew, the owner, his family, and servants.

The rules to be observed with regard to lights and fog signals are not materially altered, the Admiralty having the power from time to time to alter or make regulations. All such regulations are to be advertised in the London Gazetts. The new rules for ships passing and meeting each other (section 296), have been

altered.

Many alterations are made in the *Pilotage Law*, which, as they chiefly relate to minor details, will be best learned from the Act. By (section 354) all hometrade passenger ships are to employ qualified pilots, unless they have pilot-certificated masters and mates, the penalty, in default, not to exceed £100. It is important to notice that the owner is relieved from responsibility (section 388) "for any loss or damage occasioned by the fault or incapacity of any qualified pilot acting in charge of such ship," within any district where the employment of a pilot is compulsory by law. This is in accordance with the judgment of Dr. Lushington in the case of the *Protector*, the subject having furnished materials for several conflicting decisions. There is nothing to call for notice in respect to the matter of *Lighthouses*, except that the jurisdiction of the Trinityhouse (section 389) is extended to the Channel Islands.

With regard to life-boats, and the saving of life and property from shipwrecks on the coasts of the United Kingdom, power is taken by the Act (section 418) to charge on the Mercantile and Marine Fund the expenses incurred in establishing and maintaining life-boats, and for rewarding the preservation of life in all

such cases.

The Wreck and Salvage Law, now incorporated in the present Act, has undergone considerable alteration. The powers of inquiring into wrecks and casualties are greatly extended, in which the inspecting officer of Coast guard, or officer of Customs (section 432), under the sanction of the Board of Trade, may be engaged and take evidence, and may also (section 439) be appointed as receivers. The Board of Trade is to determine all disputes as to the amount payable to receivers, whenever disputes arise. The Board of Trade has also the power (section 434), when nautical knowledge is required, to appoint an assessor. The provisions of the Wreck and Salvage Law, being part of the

new Act, are extended to Scotland.

Important provisions are introduced into the Act in respect to salvage. Saving of life from shipwreck is to take priority of all other claims for salvage; and where the property salved is not sufficient, the Mercantile Marine Fund (section 459) is made available for the purpose. Disputes with respect to salvage claims 459) is made available for the purpose. Disputes with respect to salvage channel on exceeding £200, are to be referred to the arbitration of two Justices of the Peace, and an umpire if necessary. With the consent of the parties concerned, the same reference may be made for any larger sum; but failing so to agree, the latter cases will, as heretofore, find their way into the Admiralty Court. This provision, however, will be very beneficial in preventing expensive litigation—which is of frequent occurrence - for small amounts not worth the costs. In all claims for salvage, on the salvor abandoning his lien on the property, an agreement entered into by the master, or other person in charge of the ship, to abide the decision of the Admiralty Court, will bind the ship, cargo, and freight payable, as well as the owners thereof, for the salvage which may be adjudged to be payable.

The alteration in the law in regard to the responsibility of shipowners is the last subject to which it seems necessary to direct attention. As grave doubts have existed since the passing of what is known as Lord Campbell's Act, giving compensation for injuries received from accidents, whether or not injury or loss of life by shipwreck were subject to its provisions, it is gratifying to observe that the question is now set at rest, by section 504, which enacts that, in case of loss of life or personal injury caused to any person carried in a ship, or—by reason of the improper navigation of such ship—to any person carried in any other ship or boat, no owner of any seagoing ship shall be answerable in damages beyond the value of his ship and the freight due, or to grow due, at the time of the occurrence. But in no case where any such liability is incurred is the value of such ship and freight to be taken to be less than £15 per registered ton. For the purposes of this part of the Act, freight is deemed to include passage-money, as well as the value of the carriage of goods or merchandise, which removes a doubt entertained in respect to former Acts.

Such are the principal new features to be found in one of the most elaborate and comprehensive measures that the British Legislature ever gave birth to.

By a subsequent Act, 17 and 18 Vict. c. 120, no less than 48 Acts, or parts of Acts are repealed, in consequence, chiefly, of their consolidation in the Merchant Shipping Act, the noticeable clauses are (section 7), enabling the Board of Trade, out of the Mercantile Marine Fund, to defray the expenses of the lifeboats on the coast, and (section 16) imposing a penalty of £30 on masters of vessels, leaving natives of Asia, Africa, or the South Sea Islands, in England, who shall become chargeable to any parish, within six months from being so left, unless such person has left the vessel against the consent of the master.

Subjoined are some of the Tables of the Merchant Shipping Act:-

TABLE P.—(Section 125.)
Fees to be charged for Matters transacted at Shipping-offices.

	or once gong.		***************************************	an pranj iye	
1. Engage	ment of Crews	L	1 % I	decharge of Cr	CW&
		G. L		•	L. L
In Ships under	60 toms	- 0 4	In Ships under	60 toms	- 9 4
60 to	100 ,,	- 0 7	~ 60 to	100	- 0 7
100 to	200 ,,	- 0 15	100 to	200	- 0 15
200 to	800 m	- 10	200 to	300 "	- 10
300 to	400 ,	- 1 5	300 to	400 ,	- 1 5
400 to		- 1 10		500 🗒	- 1 10
50 0 to	COO ;;	- 1 15			- 1 15
	700 **	- 2 0	60 0 to		- 2 0
700 to		- 2 5	700 to		- 2 5
860 to	900 ;	- 2 10	800 to	900 ,	- 210
900 to	1000 ,	- 2 15	900 to	1000 ;	- 2 15
Above		- 30	Above		- 3 0
And so on for			And so on for a	Ships of larger	Tonnage,
	very 100 tons a	bove 1000,		ery 100 tons a	bove 1000,
Five Shilling		•	Five shillings		•
2. Engagement	of Seamen sep	arately.	4. Dischar	ge of Seamen w	sparately.
Two Shi	lings for each.	•	Two 8	hillings for eac	h.

TABLE Q .- (Section 126.)

Sums to be deducted from Wages by way of Partial Repayment of Pees in Table P.

1. In respect of Engagements and Dis-
charge of Crews, upon each Engage-
ment and each Discharge a. d.
From Wages of any Mate, Purser, Engineer, Surgeon, Carpenter, or
Steward 1 6
From all others excent Amprentices 1 0

 In respect of Engagements and Discharges of Seamen separately, upon each Engagement and each Discharge.

One Shilling.

TABLE R .- (Section 183.)

Fees to be charged on Examination.

			z	8.	d.	
For a Certificate as Master	-	-	2	6	0	
For a Certificate as Mate	•	-	1	0	0	

TABLE T .- (Section 314.)

Fees to be charged for the Survey of Passenger Steamers.

		E. E.	d.
For Steamers not exceeding 100 tons	-	2 0	0
For Steamers exceeding 100 and not exceeding 300 tons	•	3 0	0
For Steamers exceeding 300 and not exceeding 600 tons	-	4 0	0
And for every additional 800 tons an additional	-	1 0	0

MERCURY .- See QUICESILVER.

MEXICO.—This republic now consists of 23 departments, 2 territories, and a federal district. The whole area includes 846,615 square miles, with a collective population estimated in 1850 at 7,485,206. Sinaloa and Sonora comprising 7865 square miles and 300,000 population, were delivered up to the United States by the treaty of 1853, and Tehnantspec sold to the United States for 25 million dollars.

According to the records of the Mexican Government, the value of the foreign imports into that Republic at the present date is about 26,000,000 dollars, and that of the exports 28,000,000 dollars, making a total foreign interchange of imports and exports of 54,000,000 dollars per amum. This commerce is distributed as follows:

	Dollars.	Dollera.
	83,400,000	Exchanges with Guatemala, Chili, &c. 500,000
Exchanges with the United States		Exchanges with Cuba 1,200,000
Exchanges with France	5,500,000	Exchanges with India and China 1,000,000
Exchanges with Germany	2,060,606	
Exchanges with Spain	1,200,000	Total - 54,000,000
Exchanges with Belgium	400,000	£10,800,000

The number of vessels that entered at Vera Cruz in 1858 were 203, of 29.701 tons. The value of cargoes in British vessels that entered were in 1852, £281,229; in 1853, £503,718; in 1854, £294,534; in 1855, £399,891. At Tampico 84 vessels, of 10,140 tons, with cargoes valued at £266,840, entered in 1858. At Mazatlan 50 vessels, of 22,028 tons, entered in the same year. A large trade has recently sprung up in Istle, or Mexican fibre, as it is termed. which is exported from Tampico to the extent of about 3,000,000 lbs. a year to Great Britain, France and the United States. It is a strong fibre obtained from the agave; used as a substitute for bristles in brush-making. About half-amillion sterling of specie is shipped annually from Tampico in the British mail contract packets.

MILK. The aggregate consumption of milk in the United Kingdom has, excluding the other dairy products obtained from it, been roughly estimated at 1300 million quarts per annum, which would require to supply it half-a-million milch cows. The demand for milk in London, Liverpool, Manchester and other large towns is very great, and if we could arrive with any precision at the extent of the metropolitan consumption, it would be a curious and instructive investigathe metropointan consumption, it would be a curious and instrictive inserting in the metropointan consumption. If we take the resident and floating population of London at 3,000,000, and assume that they use a quarter of a pint each per day, this would require a weekly supply of 656,250 gallons, or 17,062,500 bara (or double) gallons a year, for which the consumers pay at least £1,706,250.

The great proportion of the London supply now comes up by railway from considerable distances, and the country milk trade is daily increasing. Scarcely one-fifth of the London supply is furnished by cows kept in the metropolitan leavestalls and no doubt ere long the whole will come from the suburban districts

lay-stalls, and no doubt ere long the whole will come from the suburban districts and the home counties. According to the London Directory there are about 3000 dairymen for the supply of the metropolis; what number of itinerant milk vendors there may be would be difficult to state. There are also professed vendors of asses' milk for invalids.

Various plans for the production of artificial milk and the preservation of milk in a solidified form, have been brought before the public from time to time, but none have attained to much commercial importance.

MOHAIR. The commercial term for the long silky hair of the Angora goat. It is imported under the name of Turkey goats' wool, and the manufacture, which chiefly centres in Bradford, is now a very important branch of the woollen trade. The quantity of this goats' hair received has finctuated con-siderably. From 1844 to 1847 the imports averaged about 1,800,000 lbs., between that period and 1852 they averaged only about 200,000 lbs. annually. Since 1853 the average imports have been about 3,000,000 lbs.

Mohair is particularly adapted for damasks, velvet for coach linings, curtains and ladies' dresses, mixed with cotton and silk, and produces a most agreeable texture. A large quantity of the yarn spun from it in this country is exported to France and Germany, where it is chiefly manufactured into velvet.

In the last ten years the price of mohair has advanced with the extended demand and consumption. While in 1849 it sold at 1s 8d per lb., in 1859 it had advanced to 3s per lb.

The Angora goat has been successfully introduced into the Cape Colony, South Australia and parts of the United States.

MONEY.—See Coinage, Gold, &c.
MONEY.—See Coinage, Gold, &c.
MOROCCO. The population of this empire is now only reckoned at about 6,000,000, and the value of its import and export trade is a little over £2,000,000 sterling. The population of Mazagan is about 1500, and of Mogadore 16,000, of whom 12,000 are Moors, and 4000 Jews. Mogadore harbour is considered the best along the coast. The population of the province of Tangier consists of about 200,000 souls; the town comprises 8500, 6000 being Moors, and 2200 Jews. The imports into Tangier in 1856 were of the value of £135,566, of which £101,773 was British goods. The exports were £77,263, of which £63,580 was British goods. The town of Tetuan consists of about 22,000 Moors, and 10,000 Jows, and the whole province or government 100,000.

The vessels that entered at the several ports of Morocco in 1855 were 836, of 74,679 tons; the value of their cargoes being £444,753. At Tangier the entries in 1856 were 313 ships, of 1564 tons. At Tetuan, 109 ships, and 1617 tons. At Mogadore, 114 ships, and 14,114 tons, with cargoes valued at £336,513. The chief trade here is British—comprising 61 vessels, and 7986 tons, with cargoes of the value of £268,102, while the return cargoes are about the same value. The general trade of Morocco at all the ports in 1856 was—imports, £987,119; exports, £1,090,218. The entries of ships in the same year, 98,184 tons, of which 53,357 tons were British.

MOTHER OF PEARL is that beautiful white enamel which forms the

MOTHER OF PEARL is that beautiful white enamel which forms the greater part of the substance of most oyster shells, but especially the larger ones found in the seas of the Pacific and Indian Oceans. It is much used now for pearl button making, for paper knives, toys, inlaying work, and various fancy articles. In 1845 it was admitted duty free, but it was only in 1853 that mother of pearl shells were deemed of sufficient importance to appear in the Board of

Trade returns. The imports since then have been as follows:-

		Cwts.		Value.
1853	***	15,480	***	_
1854	•••	86,644	•••	£88,305
1855	•••	20,120	***	34,634
1856	• • •	42,032	***	76,544
1857	•••	84,894		57.819
1858	•••	25,109	•••	60,448

There are about six commercial varieties of these shells, known as the white edge, brought from China and Singapore; the yellow edge, from Manila; pure white, from Bombay, Egypt, and South America; and the black, from the South Sea Islands. These are further subdivided according to size and quality. The smallest are the South American, weighing about half-pound per shell (the single valve); the Bombay and Egyptian weigh about \$\frac{1}{2}\$ lbs. the South Sea (black), 1 lb.; and the Singapore and Manila as much \$1\frac{1}{2}\$ lb. The price of these shells has risen greatly of late years, owing to the more varied uses and increased demand. The black or South Sea shells, which were formerly of little value, since the change of fashion which brought into use the large dark pearl buttons for lady's paletots, gentlemen's waistcoats, shooting-coats, &c., have risen fully 100 per cent, in price. Even the small true pearl oyster shell from the fisheries of Ceylon, which were deemed worthless, have now come into use for the nacreous substance which they furnish, for although thin it serves for inlaying and other purposes.

MUSICAL INSTRUMENTS. A considerable import and export trade is

MUSICAL INSTRUMENTS. A considerable import and export trade is carried on in musical instruments of various kinds. In 1853 and 1854, the declared value of the British made instruments of all sorts, exported, was £173,300 per annum, but since then the amount has only averaged about £140,000 per annum. About 600 foreign made piano-fortes and 3000 to 4000 harmoniums, besides other instruments are imported. The aggregate value of

the musical instruments, imported in 1858 was £128,856.

MYROBALANS. One or more species of this dried fruit, chiefly the Terminalia Chebula, is now largely imported into this country from India for tanning and dyeing purposes. The imports frequently reach 9000 tons a

vear.

NAPLES. The political position of this State has been materially altered in the present year 1860. The insurrectionary movement under Garibaldi has resulted in the expulsion of the King of Naples, and the annexation of the king dom by the suffrages of the people to the sovereignty of Sardinia. The population of the Continental States in 1856 was 6,886,030 souls, and of the Island of Sicily, 2,242,000. The town of Palermo had in 1857, 200,000 inhabitants. The national debt of the kingdom amounted in 1854 to £20,312,000. The revenue in 1856 was £5,271,061. The imports in 1857 of the Continental States amounted to £2,985,000, and of the island, £971,362. The exports were, Continental States, £2,490,000, and the island, £2,193,964.

NATAL. This settlement on the south-east coast of South Africa, formerly a dependency of the Cape Colony, was constituted a separate colony in 1849. It embraces an area of not less than 20,000 square miles. Durban is the sea-port and commercial town, but Pietermaritzburg, 50 miles inland, is the seat of Government. The population of the colony in 1857 was 121,068, of whom 112,906 were coloured. The value of the imports in 1859 was £200,000, and of the exports, £100,000. The principal shipments were wool, £24,000; butter, £18,000; ivory, £16,618; arrow-root, £13,436; sugar and molasses, £9368. The reve-

nue of the colony was £51,000.

NAVIGATION LAWS. All vestiges of these celebrated laws may be now considered to have been swept away by recent statutes. The high-rate of freights in 1853 led to an important inroad on exclusive maritime immunities, and which was chiefly occasioned by a scarcity of seamen to man the mercantile Under the 16 and 17 Vict. c. 131, sect. 31, the famous protective clause requiring the master of a British ship, and the whole or a certain proportion of his crew, to be British seamen is repealed. But the conclusive advance in maritime liberality was made in 1854 by opening the Coasting Trade to foreign ships. By 16 and 17 Vict. c. 107, no goods or passengers can be carried coastwise from one part of the United Kingdom to another, nor to or from the Isle of Man or the Channel Islands except in British ships. These restrictive enactments are repealed by 19 Vict. c. 5; subject to the Customs' Act, 1853. Foreign ships in the coasting trade are to be subject to the same regulations as British ships; and so are foreign steam vessels carrying passengers.

The national flag still continues under cover, and by 16 and 17 Vict. c. 187, sect. 33, to prevent undue assumption of the British flag it is enacted, that if any person use the British flag and assume the British national character on board any ship, owned by any persons not being entitled by law to own British ships and navigate them under British colours and papers, for the purpose of making such ship appear to be a British ship, it shall be lawful for any officer on full pay in the Naval service, or any officer of Customs, to seize and detain such ship on the high seas or in any British port, and to bring her for adjudication before a Court of Admiralty. If it is made to appear to such Court that such ship has been so navigated under the British flag and British papers, the

such ship has been so navigated under the British hag and British papers, the Court may pronounce the ship to be confiscated to the Queen.

NEW BRUNSWICK. The population of this British American colony is now 213,187 souls. The latest official statistics of the colony are for 1857, and from these we find that the revenue was £135,094, and the expenditure, £134,598. 3170 vessels, of 587,595 tons entered, and 3181, of 659,277 tons cleared. The imports were valued at £1,418,943, and the exports at £917,775. The principal exports were £11,751 worth of fish (preserved and fresh), £12,039 of dry salted fish, and £45,490 of wet salted fish, £1910 of moved fish, £77,343 of beards and sentilines. £489,669 of deals and £116,615 smoked fish, £77,343 of boards and scantlings, £459,662 of deals, and £116,615 of pine timber. There were £643,954 acres of cleared land, the produce of wheat being 206,635 bushels, and that of oats 1,411,164. Wheat averaged wheat being 206,635 bushels, and that of oats 1,411,164. Wheat averaged 8s 9d per bushel, and oats 3s. In 1857, there were 22,044 horses, 106,268 horned beasts, 168,038 sheep, and 47,932 swine. The rate of wages for domestic labour was £2 10s to £3 per month (with board); predial labour £2 10s to £4 per month; and trades, 5s 6d to 10s per day.

NEWFOUNDLAND. The population of this island in 1857 was 122,638

souls. The revenue, £149,324; the vessels which entered the ports of the colony, 1538, measuring 203,162 tons. The value of the imports, £1,413,423;

and of the exports, £1,651,165.

NEW GRANADA. The republic is now divided into nine provinces, has an area of 515,235 square miles, and a population in the year 1853 of 2,363,054 souls. The number of vessels that entered at Panama in 1858 was 142, of 92,034 tons, and with cargoes valued at £11,373,424. The value of the cargoes cleared in the same year was £2,468,203. The vessels that entered at Santa Martha in 1855 were 140, of 46,043 tons, and with cargoes worth £634,500. At the port of Rio Hacha in 1858, 52 vessels, of 10,376 tons, and cargoes worth £22,500; the export cargoes being valued at £98,700. At Carthagena the entries in 1858 were 99 vessels and 73,480 tons. The cargoes entered in 1854 were valued at £62,533, and those cleared at £254,603. At Savanilla in 1858, the entries were 56 ships, 10,652 tons, and cargoes worth £36,213. The clearances were 106 ships, 15,630 tons, with cargoes worth £391,163.

The existing communications with the Isthmus are a line of British mail steamers rule existing communications with the Istimuts are a line of british mail steamers twice each month between Southampton and Aspinwall, connecting with the British Pacific Mail line running between Panama and Valparaiso—touching at fifteen intermediate ports—an English screw steam-ship between Liverpool and Aspinwall. Lines of sailing vessels to Aspinwall from London, Liverpool, Bordeaux, Bremen, and New York. A steam-ship line between New York and New Orleans and Aspinwall, connecting with the California line between Panama and San Francisco, and a steam-ship mail line monthly between Panama and San Ione de Caustensla touching at five intermediate ports. San Jose de Guatemala, touching at five intermediate ports.

The value of exports for 1856, according to the Custom House returns, was 5,659,209 dollars. The gold exported, of which no return is made is calculated at 1,800,000 dollars, and the silver at 200,000 dollars. The exports of the Isthmus of Panama, consisting of pearl shells, pearls, hides, gold and timber, is estimated at 200,000 dollars. The export of gold, balsam of Tolu, India-rubber and dyewoods from the Atrato district, at 60,000 dollars, and the tobacco, hides and other articles from the ports of Casanare at 16,000 dollars.

All these gave a total of 7,935,209 dollars, which may be divided as follows:---

Tobacco, 2,687,598 kilogrammes, at 25 dol					Dollars.
	llars per	160 lbs. o	m board	-	1,348,800
Quinine, 36,604 quintals, 34 lbs. at 30 doll	lars per o	nintal		-	1,098,130
Coffee, 42,629 quintals, at 10 dollars per qu	nintal		-	-	426,290
Panama Hats, 261,324, at 15 dollars per d	OS.	-		-	326,625
Hides, 1.063.991, at 12 dollars per quintal	1	•	-	-	355,357
Corn. Mest, and other Provisions	_	-	-	-	143,227
Dyewoods - Brasil Wood, 969 tons, at 40 d	dollars pe	r ton	-	_	38,760
Other Dyewoods, 4583 tons, at 15 dollars	per ton	-	•	-	68,745
Dividivi, 21914 tons, at 40 dollars per ton		-	-	-	87,660
Dividivi, 2191) tona, at 40 dollars per ton India-rubber, 174,941 kilogrammes, at 35	cents per	r kilogra	mme	-	61,229
Cotton, Cigars, Sarsaparilla, &c	-	~	-	-	27,978
Tiles and Earthenware -	-	-	-	-	22,319
Timber for building		-	-	-	14,940
Balsam of Tolu, Tortoiseahell, &c.	-		-	-	10,596
Sugar, &c	-	•	-	-	7.565
Miscellaneous articles, such as Platina, S	Silver, Co	pper, Le	ad. Silver	Ore	•
and Emeralds	-	-		-	38,065
Gold, cleared in the Custom House at Ca	rthagens		-	-	1,587,923
Total	•	-	•	-	5,659,209
To which must be added-					
Gold not declared	_	_	_	_	1,800,000
Exports of Panama	-	-	_		900,000
Silver exported to Venezuela and Ecuado		-		_	200,000
Exports of Choco and Casanare, of which		- -		Ξ	76,000
majoras or onoce and oppositely or which	HO ! COLL	TD 4TO TO		_	
Grand Tota	ıl	-	-	•	7,985,209
Dividing the exports into three cla					
tural products, and manufactures, we fi	ma mon				
•	mu sner			rs 1.4	115.547
Natural products—value -	ina ener	•	- dolla		115,547 176,393
•	ind sher	•		2,1	115,547 176,322 162,105

The above does not include the products or gold of the Isthmus of Panama.

The gold produced in the country is divided thus:-

Washings without machinery	-	-	dollars	1,600,000
From rivers by machinery From veins by chemical process	•	:		1,149,000 587,923
Total—equal to the exports	ച്ചവർ ര	f gold in th		3,356,923

is calculated as follows:---

						Dollars.
England, Gold, Quinine and Dy	ewoods	-	-	•	-	8,400,000
United States, Coffee, Quinine, I	Hiles, Dy	aboows	and India	m-rubber	-	1,450,000
Germany, Tobacco -		•	•		_	1.000,000
France, Gold, Quinine, Balsam,	&c.	-	-	-	-	600,000
Venezuela, Gold and Silver Coin		dsions	-		-	500,000
Ecuador, Gold and Silver Coin					-	250,000
Peru, Gold and Tobacco	-		_	•		800,000
Other Countries -	_	-	_	_	-	150,000
	-	_	_	-	_	
	Total		_	_	_	7,650,000

NEW SOUTH WALES. The Port Phillip district was separated from New South Wales in 1849, and made a separate colony under the name of Victoria. The northern district of Moreton Bay was also withdrawn from the Sydney Government, and formed into the colony of Queensland in 1859. 15,578 immigrants arrived in New South Wales in 1857, 10,205 of whom went out at the public expense, and 5373 at their own expense; 8538 were males, 4412 females, and 2628 children under 14. 4612 males and 1961 females left the colony in the same year. The public income amounted to £1,531,137, and the expenditure to £1,543,328. 1100 vessels, of 351,413 tons, entered, and 1204, of 377,147 tons, cleared out in 1857. 132 vessels arrived from the United Kingdom, and 310 from the British colonies. 10 vessels were built and 45 registered in the colony in the year. The value of the imports was £6,729,408, including £3,797,350, the produce of the United Kingdom, and £1,640,520 of her colonies. The exports were £4,011,952, of which nearly £3,000,000 was the produce of the colony (gold included). The exports included 135,805 gallons of ale and beer, 890,527 lbs. of cheese, 151,197 bushels of maize, 107,468 hides and skins, 781,670 lbs. of tea, and 17,044,201 lbs. of wool. The value of the gold and bullion in the Royal Mint and banks in 1857 was £1,388,565. The total number of mortgages on lands was 1168, to the amount of £703,389. There were 175 mortgages on live stock, including 904,360 sheep, 135,834 horned cattle, 3141 horses, to the extent of 655,462. Seventeen mines produced 210,434 tons of coal, valued at £148,158. The Post-office employed 274 persons; the extent of post roads was 1,289,386 miles, and the number of letters that passed by ship and inland was 2,602,919, besides 2,214,411 newspapers. 183,385 acres of land were under crop, producing 1,289,044 bushels of wheat. 1,118,006 bushels of maize, 58,088 bushels of barley, 61,253 bushels of oats, 21,491 tons of potatoes, 1301 tons of tobacco, and 53,064 tons of hay, &c. 1128 acres of land were planted with the vine, producing 108,174 gallons of wine, and 1414 of brandy. The live stock in 1857 included 180,053 horses, 2,148,664 horned cattle, 8,139,162 sheep, and 109,166 swine. 48,341 sheep, and 25,111 cattle were slaughtered in 1857, producing 40,597 tons of tallow. 81,860 yards of woollen (cloth and tweed)

were manufactured; also 37,228 cwt. of soap, and 1346 cwt. of tobacco. 166,000 cwt. of sugar were refined. There were 157 mills of all kinds for grinding grain. Wheat sold in 1857 at 7s 4d per bushel; bread of the very first quality, 3½d per lb., and of the second, 2½d; rice, 5d; tea, 2s 6d; coffee, 1s 8d; sugar, 7½d; meat (fresh), 3½d; English cheese, 1s 7d, and colonial, 1s; potatoes, 14s 6d per cwt.; colonial wine, 9s 2d, and imported wine (best quality), 14s 9d per gallon; brandy, £1 15s 6d per gallon (very dear, of course); colonial beer, 4s, and imported 7s 6d per gallon; candles, 9d per lb.; lamp oil, 10s per gallon; soap, 7d per lb.; starch, 1s, and blue, 2s 6d; colonial tobacco, 2s 7d, and imported 5s per lb. Men's moleskin coats were 16s each, and jackets 10s; waist-coats, 8s 6d; trousers, 8s and 9s; check shirts, 3s 3d; strong boots, 16s 6d; shoes, 11s 6d; shepherds' coats, 22s; socks, 10d; handkerchiefs, 9d each, and straw hats, 5s 11d. Women's print dresses were 6s, and merinoes, 12s each; flannel petticoats, 7s, and calico petticoats, 3s 2d; stockings, 1s 2d; shoes, 7s 6d; caps, 2s 6d; shawls, 10s 6d; shifts, 4s 4d; stays, 7s 2d; aprons, 1s 3d; and straw bonnets, 6s. Wages, without board, were, in 1857 (average)—carpenters, 12s a-day; smiths and wheelwrights, 12s; bricklayers, 13s; and masons, 14s. Farm labourers, with board, £30 to £40 a-year, and shepherds, £30 to £35; nurses, £15 to £20; general house servants, £20 to £25; and dairywomen,

&c., £18 to £20 a-year.

The public debt of the colony is now as much as £4,000,000, or about £10 per head on every European resident, and the debentures by which this amount has been raised bear interest at the rate of 6 per cent. It is remarkable that while the yield of gold in the adjoining colony of Victoria is declining, more should be obtained in New South Wales; but an explanation of the circumstance will probably be found in the fact that many persons have abandoned Victorian diggings and tried their fortunes elsewhere. Even now, however, the yield of gold in Victoria exceeds the supplies obtained from New South Wales in the ratio of 5 to 1. Between Jan. 1 and Dec. 9, 1859, 917,000 sovereigns and 321,000 half-sovereigns were issued from the Sydney Mint; in the corresponding period of 1858 the numbers were 1,016,500 and 486,000 respectively. The receipts of golddust at the Mint were 318,808 oz in 1859, and 327,335 oz. in 1858. The Customs' revenue received in the port of Sydney in the ten months ending November 30, 1859, were £541,585 against £492,236 in the corresponding period of 1858, showing an advance of about 10 per cent. The number of horses in New South Wales was in 1848, 97,400, and in 1858. 200,700, showing an increase of 103,000, or 106 per cent. The number of horned cattle was in 1848, 1,366,200 and in 1858, 2,110,600, showing an increase of 744,400, or 54 per cent.; and the number of sheep was in 1848, 6,531,000, and in 1858, 7,582,000, showing an increase of 1,051,000, or 16 per cent. Since 1855, however, the number of sheep in the colony has considerably fallen offviz., from 8,602,000 to 7,582,000, the principal assigned cause for the diminution being the growing demand for the Victoria markets. It appears that the supply of live stock does not quite keep pace with the increase of population in Victoria and New South Wales, the number of animals being 203 to every 100 persons in 1857, and 196 to every 100 in 1858. This circumstance has not escaped the vigilant eye of Sir W. Denison, Governor-General of New South Wales, who, in a paper published on the subject in December, urges that the only mode in which there appears a prospect of overcoming the difficulty, which is becoming every day of greater and greater importance, is by adding to the weight of the stock by providing better and more abundant food, by changing the breed of sheep, substituting as in England an animal with a coarse fleece and a heavier carcase for the present fine woolled varieties, and by paying

similar attention to the breeding of cattle.

NEWSPAPERS. The repeal of the newspaper duty and of the advertisement duty has led of late years to a large extension of the newspapers in the United Kingdom, and cheap journals have started up from time to time in various localities, especially in populous districts. Many of these ephemeral

publications were but short lived, and it is doubtful whether most of those maintained at the present day are profitable commercial speculations, however generally read and patronised. The electric telegraph has afforded the facilities for obtaining intelligence from distant localities, or on important matters, which they have not been slow to avail themselves of. It is difficult to obtain any reliable statistics now as to numbers or circulation, but there are about 500 newspapers published in the United Kingdom, including the Channel Islands.

The following was the number of stamps issued to Newspapers in 1850:-

London, 295 papers	•	Stamped. 47,178,339	Scotch	• .	• .	Stamped. 6,674,892
English-Provincial	-	19,028,674	Welsh	• '	- '	641,252
Irish—Dublin -	-	3,450,384				
Irish—Provincial	-	2,682,000	1	otal	•	79,655,541

According to the Report of the Select Committee on Newspaper stamps in 1851, the number of stamped sheets for newspapers issued in Great Britain and Ireland in the years ending March respectively, were as follows:—

1814 at 4d	•	-	28,788,404	١	1845 at 1d and 1d	-	84,119,770
1884 at 4 <i>d</i>	-	-	84,718,922	ı	1851 ditto	•	91,651,089
1837 at 1 <i>d</i> and	} ₫	-	53,897,926	l			

The gross duty received from Newspaper stamps in the United Kingdom in 1850 was £356,969, of which £298,264 was collected in England, £32,353 in Scotland, and £26,352 in Ireland.

The duty on advertisements was repealed July 21, 1853. The newspaper compulsory stamp was repealed in 1855, but it was retained at option for postage transmission. In 1858, 71,000,000 newspapers were delivered in the United Kingdom, and 7,250,000 book packets passed through the post. The average weight of book packets was 5½ oz. each, and of newspapers 2½ oz. each. The average postage on book packets was 2½ each.—See Post Office.

In 1850 there were 47 different journals in the Australian colonies, having 83 issues weekly, but the gold discoveries, the large tide of emigration, and the progress of settlement have largely increased the number of journals. The total number of newspapers now issued in the Australian colonies amounts to 81. Victoria has six daily, and 38 weekly and bi-weekly; New South Wales, two daily, and 18 weekly and bi-weekly; Tasmania, five daily, and three weekly and tri-weekly; South Australia, two daily and three weekly; and in Western Australia there are four weekly journals. In the Cape Colony there are 24 papers published, 16 of which are in the Eastern provinces, and the remaining 6 at Cape Town, the capital and seaport. Three or four are published in Natal, and a few papers are also issued in the Dutch Free State and Kaffraria, while several newspapers are also published along the west coast of Africa, at Sierra Leone, St. Helena, Cape Coast and Liberia. Mauritius, Réunion, and Ceylon have many local newspapers

have many local newspapers.

In the United States there were in 1850, 2526 newspapers, which circulated 427 millions of copies, and at the present time there are upwards of 4000 published. In 1854 there were 157 newspapers published in Canada. There are also more than 50 or 60 published in the Lower Provinces of New Brunswick, Nova Scotia, Prince Edward Island, and Newfoundland. In the British West Indies there are about 50, and the Foreign West Indies about 20. The number of newspapers published in Southern and Central America it is impossible to state with precision.

Passing to Europe, we find that there are about 1500 papers published in Germany, but two-thirds of them are mere advertising sheets. In Switzerland there are about 243, in France 600 or 700, in Spain and Portugal 40 or 50, in Russia about 100, and nearly as many magazines. Paris possesses at present 503 newspapers, 42 of these as treating of politics and national economy, have to deposit a security in the hands of Government. 460 are devoted to art, science, literature, industry, commerce, and agriculture. The most ancient of

the latter is the Journal des Savans, and dates from the year 1665. In India the number of English and native papers issued is large, and the newspaper press has even penetrated to New Caledonia, Samoa, Tahiti, the Sandwich Islands, and other groups of the Pacific.

NICARAGUA. The population of this Central American State is about \$50,000. The imports in 1855 amounted in value to £27,640, and the exports

to £55,820. The exports consisted of the following articles:-

			i	Quantities.	Value.
Hides Brazil Wood Cedar Planks, & Sugar Rice Maize Cotton Aquadiente Other Articles		:	No. Quintals Yards Quintals "" Gallons	48,670 50,000 54,000 150 94 200 96 1,000	Dollara. 146,010 100.000 21,600 i,500 376 850 288 400 5,577
- I	Pollare	-	-		276,601 £55,320

A very large extension of trade has taken place of late years NIGRITIA. with Central and Western Africa. Important discoveries as to the countries and resources of the interior have been made by Drs. Livingstone, Barth, and other travellers. Several Government expeditions have penetrated far up the Niger and its territories. The labours of Mr. Macgregor Laird, and the establishment of a monthly line of mail steamers to various ports on the west coast, have greatly promoted legitimate commerce. This and the stimulus given to cotton culture, palm oil manufacture, the collection of gums, wood, ivory and other articles, are diverting attention from the slave trade.

British Settlements. At the Gold Coast, the number of vessels that entered in the year 1857 was 429, registering 107,701 tons. The imports were to the value of £118,270, and the exports to £124,394. The latter consisted chiefly of palm oil, £50,402; gold dust, £68,973; ivory, £1538; gum, £1250; and a

small amount of guines grains and ground nuts.

In Sierra Leone, the population in 1857, was only 40,383, of whom but 105 were whites. The number of vessels which entered were 335, of 51,792 tons. The exports were to the value of £288,728, of which the principal were-440,779 lbs. of tobacco, 6669 loads of timber, 471 tons camwood, 552,646 gallons of palm oil, 78,769 bushels of palm oil nuts, 243,123 bushels of ground nuts, 36,317 lbs. arrowroot, 200 cwts. bees'-wax, 16,953 bushels of beni seed (sesame), 484 tons of ginger, 572 cwts. of gum copal, 3895 ounces of gold, 17,609 lbs. of ivory, and 676,672 lbs. of pepper pods. The imports in the same year were of the value of £172,315. At the Gambia the entries of vessels in 1857 were 221, of 32,874 tons. The value of the articles imported was £118,620, and of those exported, 201,628. The staple exports consisted chiefly of 13,554 tons of ground nuts, 62,410 hides, 3929 lbs. of ivory, 68 tons of wax, 73,539 lbs. of tobacco; cotton, and cotton goods, and rice.

French Settlements. France possesses in Senegambia some colonies divided into two arrondisements—St. Louis and Goree. The first comprises the Isle of St. Louis and other islands and villages, or market towns, and the coast extending from Cape Blanc to the Bay of Jof; the population being under 10,000. The other consists of the Island of Goree and all the coast of the Bay of Jof up to the Gambia, and the factory of Albreda. The population of Goree and its dependencies is stated at 37,931.

The Republic of Liberia settled by liberated slaves is now recognised as an independent state by the nations of Europe. Its coast line is about 500 miles in length, extending from the neighbourhood of Sierra Leone on the north to Capo Palmas on the south. The total population is estimated at 250,000 souls. exports have risen to the amount of £100,000, and are rapidly increasing.

The exports of British produce and manufactures to the West Coast of Africa

have been as follows:-

1845 - - £532,028 | 1859 to British Possessions £279,038 1850 - - 641,975 | For ign Possessions 710,239 The imports from the British possessions on the West Coast in 1858, were-

15,272 cwts. of palm oil from the Gold Coast, 62 cwts. of gum animi and 115 cwts. of copal, 36 cwts. of ivory, 1609 cwts. of ground nuts, palam oil, kernels, &c. from the Gambia, 131 cwt. of bees'-wax. From Sierra Leone, 8174 cwts. of ginger, 17,462 cwts. of palm oil, 7819 loads of teak, 1005 tons of oil nuts and kernels, 71 cwts. of ivory, 43 cwts. of bees'-wax, and 9561 lbs. of pepper.

NITRATE OF POTASH or SALTPETRE. The import of this sub-

The imports in 1859 were stance is now double what it was 20 years ago. The imports in 1859 were 445,237 cwts. The duty was removed in 1845. The bulk still comes from the East Indies, but a little is imported from the United States and the Continent.

The average price is about £2. per cwt.

NITRATE OF SODA. The nitrate ground in the province of Tarapaca covers a space of about 50 square leagues. There have been single square yards of ground that have produced nearly a ton weight of nitrate, the layer being three yards thick. If we allow only 100 pounds weight of nitrate for each square yard, we shall have the enormous quantity of 63,000,000 tons, so that at square yada, we shall nave the consumption there is sufficient for 1893 years. Iquique is the principal port for its shipment; in 1859, 78,700 tons were exported, and about 26,000 tons received in the United Kingdom.

NORWAY. The population of Norway in 1855 was 1,490,047 souls. The shipping entered inwards in 1857 were 10,928 vessels, of 476,969 lasts. The

ships owned have very much increased of late years. In 1846, the Norwegian tonnage was 291,208 tons, and in 1851, 368,632 tons. In 1859, 2564 Norwegian vessels, registering 578,078 tons, entered our ports. The value of the British exports to Norway in 1859 was £497,644. The aggregate foreign commerce of

Sweden and Norway is to the value of £20,000,000.

NOVA SCOTIA. The population of this colony in 1851 was 276,117; in 1857 the revenue was £299,129, and the expenditure £350,542. 5451 vessels, of 605,301 tons, entered inwards; and 5613, of 564,005 tons, cleared outwards. The value of the imports into the colony was £1,936,176, and that of the exports £1,393,566. The total acreage of land in the colony granted up to 1857, was 5,633,028, and the total land ungranted 5,375,688; 405 grants, of 63,083 acres, were made in 1857.

We import only a small quantity of timber, skins, and oil from Nova Scotia, the computed value of which in 1858 was £83,633, but the average value of our

exports to this colony exceeds half a million sterling.

NUTMEGS. In 1830 the duty was 2s 6d per lb. on British, and 3s 6d on foreign, and the consumption was 121,260 lbs., which had increased in 1837 to 134,115 lbs. In 1838 "wild" descriptions were admitted at 1s duty. In 1846 the rate for British and foreign was equalized at 2s 6d, and for wild it was lowered to 3d. In 1847 a distinction was made between wild "in the shell" and "not in the shell," the former being charged 3d, and the latter 5d. The consumption of nutmegs in 1859 was 265,783 lbs. and there is now no duty on them.

The cultivation is carried on by the Dutch on the Banda Islands, where there are 2456 labourers employed on the plantations, of whom 1836 are on Great Banda or Lonthoir, and the rest on Neira and Ay. The annual average produce in the twenty-five years, 1830 to 1854, was 525,165 lbs. of nutmegs and 129,428 lbs. mace, and during the last fifteen of the years 579,321 lbs. nutmegs

and 137,392 lbs. of mace.

NUTRIA. Formerly upwards of a million of these small skins were imported annually from the River Plate, but in later years the numbers received declined. The skin is either dressed as a peltry or shorn as a hatting fur. In 1850 only 15,733 were imported. In 1856 the numbers received were 175,821, and in 1858 the imports again rose to 856,130, worth at 91d each, £32,997.

NUTS (HAZEL). Besides the home production of small nuts, 165,662

bushels were imported in 1858 from Spain, and 13,765 bushels from Sicily.

NUX VOMICA. The imports of this drug continue to be large, and the opinion holds that it is much employed to give a bitter to pale ales, &c. In 1858, the imports were 2997 cwts., of which 318 cwts. were entered for consumption. On the average of the four years ending with 1859, 2026 packages were received in London.

OAKUM. In 1858 the imports of oakum were 506 cwts. besides the large quantity made at home. Old rope, &c. has been much used of late for paper making, owing to the great demand for paper materials.

OATS. The produce of oats in Ireland is about 10 million quarters yearly; of England, probably, 12,000,000 quarters; and of Scotland, 4,000,000, making with the foreign importations a total consumption for the United Kingdom of 28,000,000 quarters for human food, horse feeding, seed, &c. Taking the average value at 24s per quarter, this gives an aggregate of £33,000,000 for this one grain alone. The average foreign imports of oats are now 1,750,000 quarters. Our largest supplies are derived from the Northern States of Europe and the Baltic ports, viz.:—about 800,000 quarters from Russia, and 500,000 quarters from Sweden and Denmark, Prussia, Hanover, Holland, Belgium, and a few other countries 130,000 to 140,000 quarters each. We also receive a good deal of oatmeal from abroad.

The following quinquennial returns mark the progress of the imports of ostmeal: -

			Tons.	i			Tons
1835	-	•	566,000	1850	•	•	786,000
1840	•	-	989,500	1858	-	-	371,256
1945	_	_	105 900	ì			•

The production of oats throughout the United States in 1840 was about 15,400.000 quarters; in 1850, 18,330,000 quarters; and at the present time, probably exceeds 25,000,000 quarters.

OCHRE. The imports of this earth have largely increased. In 1858, 17,326 cwts. were received from abroad. About 400 tons or more are obtained

annually near Truro, and about 100 tons in the Isle of Man.
OLIVE OIL. The use of olive oil for lubricating machinery and in the woollen manufactures, has been largely replaced by other vegetable oils, and the supply of olive has hence not increased in proportion with palm, cocos-nut and seed oil. The imports of olive oil have been as follows:-

			Tuns.	1			Tuns.
1845	-	-	12,315	1855	-	-	25,449
1850	_	_	20.784	1859	-	-	19.786

ONIONS. A very large trade is now carried on in foreign onions. In 1858. the imports were 222,530 bushels, of the value of £ $\langle 7,809$, of which 120,978 bushels came from Holland and Belgium, 51,696 bushels from France, and 44,572 bushels from Portugal. The duty was fixed at 1d per bushel on the 4th June, 1853.

OPIUM. The following figures serve to show the imports and consumption of this drug in the United Kingdom: -

		Imports.		Consumption.
1845		259,644 lbs.	•••	34,229 lbs.
1850		126,318	•••	42,324
1855	***	50,143	•••	34,473
1858		82,085		77.639

The Indian trade in opium and its extensive use in China has led to a great deal of discussion, and although its introduction was long prohibited, by late treaties with China, the trade has been legalized. In 1846-47, 22,468 chests of opium (each containing about 140 lbs.) were exported by the East India Company, and which yielded an income of £2,886,201. In 1857-58, the exports had increased to 68,004 chests, yielding £5,918,375 revenue.

ORANGES. The quantity of this fruit imported has been steadily increasing

of late years. The regular steam communication with the producing countries offering great facilities for the shipment. In 1859, 1,103,296 bushels were imported, including lemons. Taking these at the value of 10s a bushels were imported, including lemons. Taking these at the value of 10s a bushels we have an aggregate of £551,648 as the value of this fruit. The duty which had stood at 8d a bushel from 11 June, 1853, was repealed in April, 1860. Two-thirds of the whole imports come from Portugal and her islands, Madeira and the Azores; about 150,000 bushels from the Two Sicilies, and the bulk of the remainder from Spain. Of the other products of the orange, about 32,000 lbs. of orange-flower water are now imported, while some considerable trade is carried on in orange wine, orange peel, dried and candied, orange flowers for perfumery purposes, &c. Among the essential oils and essences from the citron family are bergamot from the rind of Citrus bergamia, bigarrade, from C. bigaradia; lemon, from that of C. medica; limitette, from C. limetta; neroli, from the flowers of C. bigaradia and C. aurantium; orange, from the fruit of C. aurantium; petit-grain, from the leaves of C. bigaradia and aurantium.

In the towns of Grasse, Nice, and Cannes, there are about 1,760,000 lbs. of orange flowers used, valued at £32,000, and from these are made 1,100,000 lbs. of first quality orange-flower water, worth £30,000; and 2,200,000 lbs. of second quality, worth £50,880. This is exclusive of the expensive essential oils; neroli, for instance, distilled from orange flowers is worth about £10 per lb.

ORCHAL. The imports of orchella weed, a name for various species of dye lichens, *Roccella*, and *Locancra*, are now very much larger than in former years. In 1858 the imports reached 44,221 cwts., valued at £92,228. The sources of supply now embrace a more extended range than the few countries from whence these lichens were previously obtained. We receive quanties now from the Western Coasts of Africa and America, about 9000 cwts. from Portugal and the Canaries, and considerable supplies come through France and Holland from distant quarters.

OSTRICH FEATHERS. The elegance of the feathers of the ostrich (Struthio Camelus), arising from their slender stems and the disunited barbs, has occasioned them to be prized in all ages, and they still constitute a valuable article of commerce. Northern and Southern Africa are the quarters from whence we receive our chief supplies. There are three qualities in Morocco, which are known as Jemeny, Sennari, and Haggasi. There are feather merchants in Mogadore and other States, who are in communication with all the districts of the Desert where the bird is found. Graham's Town in the Cape

Colony is the principal mart for ostrich feathers in Southern Africa.

The American ostrich (Rhea Americana) inhabits chiefly the vast plains of Patagonia, the Banda Oriental, the province of Entre Rios, and the adjoining republic. It is smaller than the true ostrich, is without a tail, and the feathers are not so handsome as those of the African bird. The Indians, however, make plumes, parasols, and many beautiful ornaments of the feathers, which are highly valued there, and are occasionally exported. The coarsest part of the ostrich plumage is generally denominated hair, to which it bears some resemblance. By the French it is termed estridge. It was formerly used as a substitute for beaver hair in hat-making, and of the coarser kind a stuff was fabricated. It is said to be still used by the hatters at the Cape. The value of the ostrich feathers imported varies considerably, according to the quantity and quality received. In 1857 the imports were 14,922 lbs., valued at £102,132. For three or four years revious the imports were only 11,000 lbs., in 1858 as much as 18,843 lbs. were received, and hence the price declined; the aggregate value being only £56,722. The feathers imported from Northern Africa were only worth about £2 10s, while those from South Africa were valued at £9 10s per lb. A small quantity of paddy-bird feathers, and of unenumerated feathers of the value of £24,000 were imported in 1858.

OYSTERS are met with on the coasts of N. W. Europe, America, the Mediterranean, and Adriatic Seas, and are found in banks, whence the difference of flavour and distinctions are made of hill, sand, and clay oysters. In Great Britain, France, and the United States, where the consumption is large, we have

learnt the art of transplanting the oysters and fattening them in the beds of rivers and creeks. This is called "parking" them, only the oyster parks are tracts of mud land. Two companies of merchants rent large tracts of the mud land in Southampton water, for the purpose of feeding and preserving oysters for the London market. A telegraphic message is now despatched from London to Southampton, and any quantity of oysters can, in four or five hours afterwards, be received by rail. A large quantity of oysters are opened there and sent to London without the shells, and thus an ount of carriage freight is saved. The oysters that are thus forwarded are for pickling and sauces. They are sent in cans securely covered, and in their own liquor, and keep well during the few hours they are on the rail. The trade is in operation all the year round, and between 30 and 40 vessels are employed in it. A large number of persons are employed in parking, landing, and opening the oysters. The railway waggons which take them to London are brought down by a tramway close to where they are landed. These oysters are caught near the Channel Islands, and as soon as a ship load is caught, they are sent to Southampton. They are there thrown on the oyster grounds, and at low water they are placed in rows several layers thick, with spaces between. They are continually shifted to and from the empty spaces to prevent them from being choked by the mnd. Ten-pence a thousand is paid for parking, and fifteen-pence a thousand for opening them.

The oyster fishery of Jersey has been much interfered with of late years by the competition of the French fishermen at Granville. A quarter of a century ago the exports were 150,000 to 160,000 bushels a year. The trade is, however, The fishing is most active from February to May.

still an important one. The fishing is most active from February to May.

During the spring of 1850 the number of Jersey boats employed in the fishery was 70, and 1120 tons, manned by 350 men; of English boats, 119, of 2898 tons, manned by 623 men—a total of 189 boats, 4018 tons, 983 men. The quantity of oysters caught was 105,000 tubs, which fetched 3s a tub—or £15,750! In the autumn of the same year, 40 Jersey boats, of 640 tons, manned by 200 men; of English boats, 40, of 640 tons, 220 men. These 80 boats caught 19,200 tubs, which sold at 2s 6d per tub, or £3400. The total produce of the oysters dredged in the spring and antumn of 1850 being thus, £19,150.

The number of oysters taken on the French bank, near Granville, in the sea-

son of 1852, was 94 millions, of the value of £40,000. The oyster fishery there employed 1518 men and 253 boats, of 12,650 tons.

In France, the trade in oysters has much increased of late years in the maritime quarters, particularly in the department of Charente Inférieure. The fine oysters of Marennes are particularly esteemed. Algiers possesses many oyster beds, and a lucrative trade was carried on from Africa in ancient times to supply oysters for the gourmands of Rome. Not less than 30 millions of oysters are annually deposited in the beds of the Seudre, and have added about 1,200,000 francs to its local commerce.

The boats of Courseulles and of Bernieres bring to St. Vaast and Brittany more than 30 millions of oysters, to deposit in the beds of those two communes.

The beds of Tremblade, which supply Bordeaux, employ 200 horses, which make two or three journeys a week from April to September inclusive. About 10 millions are annually furnished by L'Eguille.

The choice oysters of Lussac fetch as much as a penny a piece, and are forwarded exclusively to Paris; the green oysters of the other beds of La Sendre are sold in the capital at a franc a dozen. There are also parks and preserves at the embouchure of La Charente, at the Isle of Ré, at Havre, and at the right and left banks of the Sendre.

The annual produce of green oysters at Marennes is about fifty millions, which sell for £80,000 sterling annually. Oysters have been laid down in most of the French estuaries, and shipments for this purpose have of late years been made to Brest, the Bay of St. Brieuc, Marseilles, and other localities.

The importation of oysters into the Zollverein in the years 1825 and 1831

was on an average 1898 quintals, or reckoning 100 oysters for 20 pounds, it

gave 12 oysters for every 140 or 150 persons. In 1856 the consumption of oysters in the Zollverein was 6430 quintals, nearly 12 oysters for 111 persons, or about one oyster for 10 persons. In Berlin, the consumption in 1844, was 657 quintals, and in 1853, 2784 quintals.

The value of the oysters sold in the city of New York is said now to exceed one million and a quarter pounds sterling. There are about 1520 boats of all sizes engaged in the trade. Baltimore is another great seat of the American oyster trade, and 5,000,000 bushels per year are sold there.

PALM-OIL. The trade in this very important oil of commerce from Western

Africa, has progressed amazingly within the last twenty years. The shipments to America and France direct are considerable, besides our own importations. The imports into the United Kingdom since 1842 have been as follows:-

				Cwts.	ŧ				Cwts.
1842	-	-		424,242	1851	-	-		608,550
1843	-	-		418,429	1552	-	-		523,813
1844	-	-		414,648	1858	-	•		636,628
1845	-	-		505,704	1854	-	-		752,618
1846	-	-		366,852	1855	-	-		810,394
1847	-	-		476,301	1856	-	-		786,701
1848	-	-		510,218	1857	•	-		854,791
1849	•	-		498,331	1858	-	-		778,230
1850	-	-		447,797	1859	-	-		685,794
	Average im	port	-	450,836	1	Average in	nport	-	715,280

PANAMA. The transit trade to and from California, and between the Atlantic and Pacific generally, by the Panama railway, has given a great degree of importance to this Isthmus State and to the port of Panama. Formerly, the Western Coast of South America was chiefly furnished with European goods by sea round Cape Horn, but the facilities offered by the Panama railroad have greatly altered this state of things, and many of the most valuable articles of commerce, and all the bullion, are now sent by this route to the Atlantic, to be

shipped either to Europe or to the United States, as facilities offer.

The Panama railway, owned principally in New York, is the most profitable of any on the American continent. It is 49 miles long, was opened in the beginning of 1854, and cost £1,600,000 or a little more than £32,000 per mile. Its earnings for 1859 were £385,090—its expenses £102,000, leaving £283,090. From this, after paying interest upon £600,000 of debt, there remained a sum equal to 23\frac{3}{4} per cent upon £1,000,000 of capital. A dividend of 12 per cent has been paid for several years, and the total undivided surplus of the Company now amounts to £242,000. The passenger fare by this railway across the

Isthmus is £5, equal to 2s 11d per mile.

During the year ending Oct. 1, 1859, there entered the port of Panama, 245 vessels, under all flags, measuring in the aggregate 103,012 tons, with cargoes valued at £11,536,000; vessels cleared in the same period with cargoes valued at £2,771,400. 40,000 passengers, and £12,000,000 in specie passed over the Panama railroad in the year 1859.

PAPER. The increase in the

PAPER. The increase in the manufacture of this article of late years may be gathered from the following figures. The paper charged with the duty of excise in the United Kingdom in 1840, was 97,237,000 lbs.; in 1859, 217,827,197 lbs. showing an increase of 120,590,197 lbs in the year 1859 over that of the

year 1840.

The number of paper-mills at work in the United Kingdom in the year 1852, amounted to 380, and in 1859 to 397. The reduction of the postage rates has been one of the causes of this large increase in the consumption of paper in the kingdom; the introduction of the penny postage has had the effect of increasing the number of chargeable letters passing through the Post office, from 76 millions in 1839 to 545 millions in 1859. The proportion of letters to the population in the year 1859 amounted to about 22 to each person in England, 7 in Ireland, and 16 in Scotland. The reduction of the stamp-duty on newspapers in 1836 from 31d to one penny, also led to a great increase in the number of newspapers sent through the Post-office, while the removal of the advertisement

duty also gave an impetus to the establishment of cheap papers. The number of newspapers delivered in the United Kingdom through the Post-office in 1859, was about 70,500,000. There has been also of late years a great increase of cheap literature and periodicals both at home and the colonies, which has largely increased the demand for paper.

In 1837, the year succeeding that in which the duty on all kinds of paper was equalised, the amount of duty received was £555,942, and from that time the annual sum has increased steadily, till in 1859 it was £1,499,490. The quantity of paper of British manufacture exported in 1837 was 2,569,223 lbs., in 1840, 5,058,000 lbs., and this quantity increased each year (a temporary check to its growth being, however, received in 1848) till in 1859 it was 20,142,350 lbs. The quantities of paper imported from abroad fluctuate very considerably, but in no

year mentioned are they sufficiently large to be of importance.

The quantity of waste paper imported from foreign countries, and paper not otherwise enumerated, has varied considerably of late years, much of it, however, is re-exported; in 1848, 49, and 50 it averaged 1,100,000 pounds; in the next three years it only averaged about 700,000 lbs. In 1854 it amounted to 3,596,139 lbs., since then it has averaged 1,300,000 lbs., but in 1859 it was 1,826,300 lbs., of which 1,191,087 lbs. were taken for consumption. The fancy kinds of foreign paper imported amount to 240,000 lbs., nearly all of which is retained here. The aggregate amount of customs duty received on foreign paper of all kinds, averaged in the ten years ending with 1849, £2870, but in 1859, the annual duty had increased to £14,977.

RETURN of the Quantities of PAPER Exported on Drawback, Retained for Home Consumption, Charged with DUTY, and the amount of DUTY received, from the Year 1842 annually, up to the end of 1859 (so far as relates to the Inland Revenue Department).

Years.	Exported on Drawback.	Retained for Home Consump- tion.	Total Weight of Paper, Paste- board, &c. charg'd with Duty.	Amount of Duty.
	Lbs.	Lbs.	Lbs.	£.
1842	4,662,824	92,030,499	96,693,828	634,550
1843	4,204,570	99,245,057	108,449,627	678,888
1844	4,900,274	104,594,874	109,495,148	718,592
1845	4,864,185	119,382,886	124,247,071	815,371
1846	4,836,556	122,605,926	127,442,482	836,341
1847	5,853,979	116,111,336	121,965,315	800,397
1848	5,180,286	116,689,943	121,820,229	799,445
1849	5,966,319	126,166,341	132,132,660	867,121
1850	7,762,686	133,269,788	141,032,474	925,526
1851	8,305,598	142,597,915	150,903,543	990,305
1852	7,328,886	147,140,325	154,469,211	1,013,704
1853	13,296,874	164,336,135	177,633,009	1,165,717
1854	16,112,020	161,784,204	177,896,294	1,167,444
1855	11,118,551	155,657,843	166,776,394	1,094,470
1856	14,798,979	172,917,596	187,716,575	1,231.890
1857	16,081,063	175,690,557	191,721,620	1,258,178
1858	16,548,828	176,298,997	192,847,825	1,265,564
1859	20,142,850	197,684,847	217,827,197	1,429,491

PAPER-HANGINGS. The quantity of paper-hangings imported from abroad was formerly stated in square yards. In 1853 the imports had reached 729,255 square yards, of which 578,380 yards were entered for home consumption, and the duty received thereon was £3372. After the 8th August, 1854, the imports were taken in pounds weight, the duty imposed being 3d per lb. and the quantity brought in has averaged about 300,000 pounds weight per annum, of which the bulk comes from France: the exports of British made paperhangings are still given in yards; there were exported in 1858, 14,778,375 yards, of the value of £74,649. The largest quantity went to Australia, the United States, and British North America.

PARAGUAY. The population of this State is now estimated at 600.000. The number of vessels that entered at the port of Assumption in 1858, was 217, registering 10,691 tons. The average annual value of the imports was £200,000, and of the exports, £300,000. The chief articles shipped in 1858 were 92,575 arrobas (25 lbs.) of Paraguay tea; 272,801 arrobas of tobacco, 4159 thousand cigars, 5190 varras of timber, 21,246 pessadas of raw hides, and 3952 tanned hides, 2119 arrobas of horse hair, and 314,950 almudes of oranges.

PARMA. The population of this State is now about 500,000, its revenue £387,500, and its debt £532,000.

PASSENGERS' ACT. The present consolidating Act is the 18 and 19 Vict. c. 119, which extends to every passenger ship conveying more than thirty passengers on any voyage from Britain, Ireland, or the Channel Islands, to any place out of Europe, not within the Mediterranean Sea; except ships of

war, transports, or mail steamers.

Facilities to be given by master to the proper officers to inspect any ship, whether a passenger ship or not, intended for the carriage of passengers. Any person found on board fraudulently attempting to obtain a passage, or persons aiding such attempt liable to a penalty of £5, or imprisonment; and no passenger ship to clear out without a certificate of having complied with the provisions of the act. No ship to be allowed to clear out with a greater number of persons on board, including the master, crew, and cabin passengers than in the proportion of one person to every two tons of the registered tonnage, nor, whatever may be the registered tonnage, with a greater number of passengers, exclusive of cabin passengers, than in the following proportions:—to the space occupied by such passengers for their use, and unoccupied by stores, not being their personal luggage, namely, on the main deck and on the deck immediately below, or in any compartment of either, appropriated as aforesaid, one passenger for every twelve such clear superficial feet; or, if the ship is to pass within the tropics, one passenger for ever fifteen such clear superficial feet. Penalty for a greater number of either persons or passengers, for each not above £5 nor less than £2. Two children under twelve years of age to be reckoned as one person or passenger, but children on a book of the person of the old not computed. Two lists of passengers to be made out as in schedule, and lists of additional passengers after clearance to be made out.

Every passenger ship to be surveyed before clearance. Decks to be one inch and a half in thickness, and supported by beams of adequate strength, to the satisfaction of the emigration officer. Height between decks to be at least six fect, and only two tiers of berths allowed on any deck, with an interval of at least six inches between the floor of the berth and the deck. Berths to be constructed at the rate of six feet in length and eighteen inches in width for each adult passenger; and persons of different sexes, above fourteen, unless husband and wife, not to be in the same berth. Single men to be berthed in a separate compartment in the fore part of the vessel. Adequate number of privies to be provided. Berthe not to be removed till forty-eight hours after arrival at the port of debarkation, unless all the passengers previously to that time had volun-

tarily quitted the vessel.

For light and air in any passenger ship, the passengers at all times (weather permitting) to have free access to and from between decks by the hatchway permitting) to have free access to and from control access to any appropriated for their use. Penalty on owner for failure, not above £50 nor less than £20. Two boats to be provided for every ship of 100 tons, and upwards; three boats, if 200 tons and upwards, the number of passengers exceed fifty; four boats, if of 500 tons, and passengers above 200. One boat to be a fifty; four boats, if of 500 tons, and passengers above 200. One boat to be a long boat, and one a life boat, with life buoys, &c. Each ship to be manned with a proper complement of seamen. Gunpowder, vitriol, guano, green hides, or any other article likely to endanger life, or health, prohibited as cargo, and to part of the article likely to end and (800). and no part of the cargo to be on deck. (S. 29.)

Computed number of days of voyage for laying in stores, &c., as follows:—

PAS	224	PAS

•	_	_	Salling vessels.	Steamers.
North America	:	•	. 70 or 80	40 or 45
West Indies			. 70	40
East Coast of South A	merics.		. 84	50
Western Africa	•		. 84	50
Cape of Good Hope or	Falkland I	ales	. 105	65
Mauritius		•	. 126	75
Cevlon			. 140	85
Australian Colonies			. 140	90
West Australia	•		. 120	85
New Zealand			. 150	90
West Coast, North Am	erica	•	. 182	90

Dietary'scale for each passenger (exclusive of any providings by the passengers themselves), of water at least three quarts daily; of provisions, after the rate per week of two-and-a-half pounds of bread or biscuit, not inferior in quality to navy biscuit; one pound of wheaten flour, five pounds of oatmeal, two pounds of rice; two ounces of tea, four ounces of cocoa or roasted coffee, half a pound of sugar, and two ounces of salt. The water to be pure, and the provisions sweet and wholesome. Such issue of provisions to be made daily before two o'clock in the afternoon as near as possible, in the proportion of one-seventh part of the weekly allowance; first issue to be made on the day of embarkation to all passengers on board, and articles to be in a cooked state. Other articles of diet may be substituted by the master, in a fixed proportion, provided the substituted articles be set forth in the contract tickets of the passengers. (S. 30, 34, 37.)

Emigration Commissioners may substitute other articles of food after notice in

the London Gazette.

In every ship with above 100 passengers, a passenger steward, approved by the emigration officer, to be appointed to be employed in messing and serving out provisions, and maintaining order and cleanliness. Also a cook and cooking apparatus. In foreign passenger ships interpreters to be provided. (Ss. 38-40.)

No passenger ship, having fifty persons on board, and the computed voyage exceeding eighty days by sailing vessels, or forty-five by steamers, or having 100 persons on board, whatever the length of voyage, and not bound to North America, allowed to proceed on the voyage without a duly qualified medical practitioner on board. Ships bound to North America, and allowing fourteen in lieu of twelve feet superficial space for each passenger, may clear without medical practitioner. But no vessels to clear without medical man, if passengers exceed 500. (S. 41-42.)

Diseased persons to be relanded and entitled to recover their passage money. If passages not provided by owners, according to contract, passage-money to be returned, with compensation. (Ss. 45-47.) Subsistence money, at the rate of one shilling per day for each passenger, to be paid by the owners, in case the day fixed for sailing be deferred. In case of wreck, another vessel to be provided for the passage, or compensation may be recovered. (S. 48-49-50.) Passengers to be maintained and lodged during the voyage, and for forty-eight hours after arrival. Ships putting back, to replenish provisions, medical stores, &c.

Surgeon, or in his absence the master, may exact obedience to rules and regulations, and persons obstructing liable to a penalty not above £2, to which one month's imprisonment on shore may be added, if convicted by a magistrate. Abstracts of the act to be prepared by commissioners, and two copies posted between Penalty on master for neglect not above 40s, or on any person displacing or defacing the same a like penalty. Sale of spirits on board prohibited under penalty of £20, or not less than £5.

No person to act as a passage-broker, without a licence; penalty not less than £20 nor above £50. Directions are given for their issue and for regulating the conduct of the brokers and emigration runners. (Sec. 66-75-81.) Passenger's contracts to be made on a prescribed form. (Sec. 71-74.) Fraudulently altering contract ticket, or inducing any one to part with it, penalty not less than £2, nor above £5.

Certain exceptions from the provisions of the act in respect and in the case of "Colonial voyages," that is, voyages from one colony to another, and not exceeding three weeks in computed duration. By the above act, fifteen superficial ١.

feet of the passenger deck is required for each passenger in ships intended to pass within the tropics; but by 16 and 17 Vict. c. 84, governors of possessions abroad may, by proclamation, reduce this rate by allowing ships within their respective governments to convey passengers, being natives of Asia or Africa, after the rate of one for every twelve superficial feet instead of fifteen. Certain vessels in the East exempt from the whole of the 12th section of the Passengers Act.

PATENTS. Since the article on Patents first appeared, the expense of obtaining patents has been reduced, and the patent laws amended. A provisional protection for six months may be now had for £5, and a patent for about £25. By 15 and 16 Vict. c. 83, upon a provisional specification, a certificate of allowance will be granted for six months, but in lieu the inventor may deposit a complete specification, and such deposit will confer for six months the like rights as letters patent, but will not invalidate letters patents granted to a first inventor. The commissioners are to cause protections to be advertised; and also applications and oppositions. Specifications and objections are to be referred to the law officer, who is to have power to decide, on hearing any objection, by whom the costs are to be paid; and he is empowered (s. 15) to cause a warrant to be made for the sealing of letters patent, but the Chancellor to have the same power he now has as to the sealing of such letters patent, and the writ of scire facias is to lie for the repeal of any letters patent as would lie before the passing of this act. Letters patent (s. 17) to be void upon non-payment of fees, at the proper times. They are to be valid (s. 18) for the whole of the United Kingdom, the Channel Islands, and the Isle of Man, and the Act does not give effect to any letters patent in any colony in which such or the like patent would be invalid by the law in force there at the time being. Unless application be made (s. 19) for the issue of the patent within three months after the date of the warrant the patent is not to issue, nor after (s. 20) the expiration of the protection given by this Act (except where the patent has been destroyed or lost); and the patent may be granted (s. 21) to the personal representatives of an applicant during the term of protection, or within three months after his decease. Letters patent may be dated as of the day of application, and where antedated (s. 24) to be equally valid. Letters patent for foreign inventions (s. 25) are not to continue in force after the expiration of the foreign patent, nor are patents for British inventions to prevent the use of such inventions in foreign ships resorting to British ports, except the ships of foreign states in whose ports British ships are prevented from using foreign inventions. The Act further provides (ss. 27 to 35) that the commissioners are to cause indexes to be made of specifications, disclaimers, and memoranda of atterations heretofore or to be hereafter filed, which may be printed and published; and a register of patents, and also a register of proprietors, are to be kept, to be open at convenient times to the inspection of the public, under regulations. The commissioners are to cause to be printed, and sold at such prices as they think fit, all specifications, disclaimers, and memoranda, and may present copies of the same to such public libraries and museums as they may think fit. More than twelve persons (s. 36) may have interest in a patent. The remaining clauses relate to the form of bringing actions, the fees and salaries of officers, &c. Schedules of the proper forms are given. The following is the schedule of the fees:-

FEES TO BE PAID.

					£	8.	đ.
On leaving petition for grant of le	etters pai	tent			5	0	0
On notice of intention to proceed	with the	applicat	ion		5		0
On sealing of letters patent .			-	- 1	5	Õ	Õ
On filing specification			-	·	- 5	ŏ	ŏ
At or before the expiration of the	a third w	PAT	•	•	40	ň	ŏ
At or before the expiration of the	eoventh	VAST	•	•	80	ň	ň
On leaving notice of objections	- SO T CALL	, ·	•	•	~	ň	ŏ
Every search and inspection		•		•	- 5	ĭ	ŏ
		•	•	•	v	•	•
Entry of assignment or licence		•	•	•	v	9	0
Certificate of assignment or licen	C8	•			ū	Đ	0
Filing application for disclaimer		•			- 5	0	0
Caveat against disclaimer .	. ,	,			2	0	0
		_					

STAMP DUTIES TO RE PAID.

On warrant of law officer for letters patent
On certificate of payment of the fee before the expiration of the third year
ditto

By 16 and 17 Vict. c. 115, parts of the 15 and 16 Vict. c. 83, which required an extra copy of drawings to be left with a specification, are repealed, and by s. 2, copies of provisional specifications are to be opened to public inspection at the commissioners' office. A copy of every specification under the hand of the patentee or applicant to be left at the office. Lord Chancellor, in certain cases, may seal letters patent after the expiration of provisional protection. Doubts are removed by s. 7 respecting the making and scaling of new letters patent for a further term.

The 16 Vict. c. 5, substitutes stamp duties for fees on passing letters patent, and empowers the commissioners to purchase for public use the indexes of the 15,000 specifications prepared by Mr. Woodcroft.

The following is the schedule of the stamp duties made payable in lieu of the sums under the Act of 1852:—

act atto trop or loop.					
		4	è	8.	ď.
Petition for grant of letters patent .		. (5	0	0
Certificate of record of notice to proceed	_		5	0	0
Warrant of law officer for letters patent	-	_	5	0	ā
Sealing of letters patent	-		5	õ	ŏ
Specification	•	: 7	6	ŏ	ă
Letters patent, or a duplicate thereof, before the s	vvilvetion	•		•	•
of the third year	when server	54	n	•	•
Letters patent, or a duplicate thereof, before the			•	v	•
received become of a dishington thousand before referen	e bu seron		^	•	•
of the seventh year	•	. 10	_	v	v
Certificate of record of notice of objections	•	•	2	0	0
Certificate of every search and inspection		. (9	1	0
Certificate of entry of assignment or licence		. 1	0	5	0
Certificate of assignment or licence			0	8	0
Application for disclaimer			8	o	Ò
Caveat against disclaimer		Ξ.	9	ñ	ō
Office copies of documents, for every ninety words	•	•	ā	ň	•
omer copies or accumuming for crety milesy words		•	•	•	-

PEARLS. This gem is chiefly obtained from the Meleagrina margaritifera. The value of the pearls imported in the six years ending 1858, averaged £55,000, but in 1858 the imports reached £78,559; the pearl fishery of Ceylon netted £20,000 to the Government in 1836. In 1837 there was a small fishery, which realized only £10,631. There was no fishery again until 1855, when the same amount was obtained. In 1860 the fishery was resumed, and brought

in about £30,000.

PEASE. The imports of foreign pease now average about 160,000 quarters

1850 the imports of pease from per annum. In the ten years ending with 1850, the imports of pease from abroad ranged from 48,971 quarters, the lowest, in 1843, to 236,067 quarters, the highest, in 1849.

PENANG or PINANG. There are no returns of the population of this island later than 1851, when it was stated at 43,143; that of Province Wellesley on the coast was 67,953. In the island of Penang considerable attention is now paid to spice culture. 9430 square acres are under culture with nutmegs, cloves, &c., 10,410 acres with fruits, 7882 with paddy, and 200 with sugar. In Province Wellesley 5000 acres are under sugar cultivation, 41,000 under rice, 3033 with fruits, and about 500 with spices. The exports from Penang in 1854 consisted principally of 64,818 piculs of sugar, 5333 piculs of spices, 260,370 of rice, 118,522 of betel nuts, 27,563 of tin, and 26,012 of pepper. Many of these articles were the produce of the main land. The number of native vessels and junks that cleared from Penang in 1854 was 2225, measuring 35,944 tons, besides which, there left 254 square-rigged vessels, registering 62,834 tons. The value of the imports was £581,240, exclusive of £93,061 bullion; that of the exports, £689,002, besides £179,945 treasure and bullion.

The population of Malacca is 70,000, its trade in 1853-54 consisted of 799 native vessels, which cleared, measuring in the aggregate 9145 tons, and 206 square-rigged vessels, registering 41,060 tons. The value of the merchandise imported was £282,771, besides £104,282 in specie; the value of the exports, £182,834, and of treasure, £65,551. The total receipts by the Government in Penang in the same year were £22,705, and the disbursements, 42,403. The charges for military and convicts were £16,640; the revenue receipts for Malacca were £12,965, and the expenditure £19,265.

charges for military and convicts were £16,640; the revenue receipts for Malacca were £12,965, and the expenditure £19,265.

PEPPER. The pepper plant is a native of India, but it is now found as a regular crop in the East and West Indies, Borneo, Sumatra, the Moluccas, the Malay Peninsula, Siam, and other places. It is strictly tropical in its character, but grows freely wherever the climate is suitable. The area of the cultivation of the pepper shrub is very limited. In the Eastern hemisphere it is not grown further north than Goa, 15° N.L., further south than 5° S.L., further west than the Malabar coast, nor further east than Borneo and the Moluccas.

The exportation from Malabar and Sumatra goes chiefly to Europe and North

The exportation from Malabar and Sumatra goes chiefly to Europe and North America, that from Siam to China. From other points it is sent to the east and west. The consumption in Europe is estimated at 16,000,000 lbs., or about one-third of the entire production. This is, on an average, 1 os. annually to each European.

The price per lb. (without duty) was-

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In 1814			s. d. 1 0 per lb.
1822			0 51, ,
1830			0 34 ,,
1840		•	0 4 ,,
1859			0 4 to 5ld (duty 6d per lb.)

The estimated produce of pepper is as follows:-

	LDS.					L/06.
Sumatra, West Coast .	20,000,000	Slam	•	•		8,000,000
East Coast .	8,000,000	Malabar		ď	•	4,000,000
Islands in Straits of Malacca	8,600 000	Ĭ				
Malay Peninsula	3,788,838					50,000,000
Borneo	2.666.667	1				

In 1830 the duty was 1s per lb. on British, 1s 2d on that from places within the East India Company's Charter, and 1s 6d on that from other parts. The consumption was 2,009,272 lbs., which had increased to 2,359,935 lbs. in 1835. In 1836 the duty was reduced to 6d per lb. for all descriptions; and in 1859 the consumption was 4,243,437 lbs., yielding to the revenue £111,392. In Mr. Gladstone's Budget in 1860 the duties on other spices were abolished, but that on pepper retained.

on pepper retained.

PERU. The area of this republic was given officially in 1852 at 502,761 square miles, and the population at a little over two millions, distributed over the following departments and provinces:—

Departments.		Population.	Departments.			Population.
Amazonas		43,074	Lima			250,801
Anesch		219,145	Moquegua			61.432
Arequipa		119,836	Puno			285,661
Avacucho		132,921	Provinces.		-	,
Cusco		349,718	Callao			8.453
Huancavelic	sa.	70,117	Piura	:	·	76,332
Junin		222,949		-		
Libertad		 266,553				2.106.492

The revenue in 1857 was £3,731,249, of which £3,060,000 was derived from guano receipts, and £400,000 from import duties. The expenditure was £3,272,010; the public debt on the 30th June, 1858, was £8,853,154, of which £5,769,480 was foreign debt. The entries of shipping at Callao in 1858 were 1296 vessels, registering 650,000 tons; at Islay 49 vessels, and 19,835 tons. The number of vessels that cleared with guano in the same year was 346, registering 266,709 tons, being only about half the number of the three or four previous years.

In the first six months of 1858 635,589 tons of guano were consigned by the several contractors, 66,607 were sold, and 568,603 remained on hand. The net produce of the sales was 3,202,069 dollars, the charges and expenses eating up no less than 2,539,915 dollars out of the gross produce, which was 5,570,724 dollars. The imports into Callao in 1857 were worth £1,750,387, and the ex-

ports thence £441,484. Silver bers are the chief staple of the export trade, while cotton, woollens, provisions, and wines, and spirits figure most largely among the imports. England, France, and Chili take the lien's share of the import trade of Peru, followed by Hamburg and Panama, while England and Panama appear to be her best customers—that is to say, the largest receivers of

her exports.

PHILIPINE ISLANDS. The coasts of the Philipines extend 800 miles
the interior is interpreted by lakes. in length, and are deeply indented with bays; the interior is intersected by lakes and rivers, which in two parts of this, their principal island, and seat of their capital, bring the opposite seas of China and the Pacific, within a few leagues of each other, across a district very easily traversable; while the rest of the islands (through which flow two principal lines of foreign navigation, between Europe and China, and the Philipines and South America,) are so situated in relation to each other, that their separation promotes more than their union would do, a facility of internal and external communication strikingly attributable to the whole group, and peculiarly favourable to commercial and industrial relations.

The soil of the Philipines is exuberantly rich, and the commercial products

of hemp, tobacco, sugar, indigo, coffee, sapan wood, rice, and cocca, are very extensively cultivated in some of the provinces, and susceptible of being so dis-

tributed among all the others.

Through this group is spread a population of from 3,500,000 to 4,000,000 of inhabitants who are christianized, and with the exception of a few mountain and petty tribes and the Mahometans in Mindanao, live in peaceful subordination to the official agencies of the Government here.

In the Island of Panay, which is below the 12th degree of latitude, and generally described by the name of its chief province Iloilo, the population is 559,861. The adjacent islands, Leyte and Samar, contain unitedly, nearly 300,000, and in Luzon, the population is little short of 2,000,000.

Divided into three commercial divisions, north, central, and south, and to the central giving all the provinces between the 13th and 15th degrees of latitude, to the south the group of islands below the 18th, and to the north giving only three of the provinces, Pangasnian and the two Ilocoses with their dependents, Abra and the Union, and from this last division excluding the great range of country along the Pacific; each of these three divisions has a distinctiveness of character and commercial importance, in population, productions, wealth, industry and intelligence.

The northern part is very highly cultivated, and embraces a population of 724,946 inhabitants; and parallel to it is the large, though not numerously populated province of Cagayan, not included in that division, and in which is cultivated the finest quality and largest quantity of tobacco in the Philipines.

The southern division contains a population of upwards of 1,200,000, and the central which depends especially on Manila, within the degrees of latitude indicated, is a zone of very great natural resources, and of varied productions, ex-

tensively cultivated, and containing nearly 1,500,000 of inhabitants.

Each of these divisions is of itself a sphere of commercial and industrial activity. From Pangasnian in the north is drawn a principal part of the sugar sent to England, and to Europe; and from thence, and from Ilocos, the indigo which is exported. In Zebs, Iloilo, and the southern islands, is produced the sugar which chiefly supplies Australia; besides hemp, buffalo hides, and horns, tortoise-shell, wax and sandal wood, for the markets of Europe and the United States, and from the rich provinces which crescent Manila, the same productions are sent for export through the capital; while, independent of foreign trade, the northern division as the granary of the Philipines, and of China in its seasons of dearth, and Pangasnian as the chief ship-building province of the Philipines; and Hoilo, and the south, as manufacturing districts, of webs of much value, and articles of extensive native consumption, have resources of local trade, which enrich and animate their industry.

In the northern division there are in one of the two provinces of Rocos, six towns with a population in each of from 5000 to 8000, five towns with from 10,000 to 18,000, and one with 31,000 inhabitants, and in Pangasnian six towns with from 5000 to 8000, seven from 8000 to 17,000, two with upwards of 21,000, two of 16,000 and one of upwards of 19,000.

In the seathern provinces, Zebu has fourteen towns with from 10,000 to 12,000, and in the Island of Panay, or Iloilo, there are thirty-two towns with from 3000 to 8000, seven with 8000 to 10,000, thirteen towns with from 10,000

to 15,000, four of 16,000, one of 21,450 and another of 29,820.

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The cheapness and quality of their produce, and the commercial tendency and situation of these possessions generally, cannot be better illustrated, than by the fact, that unfostered by the Spanish authorities, and uninfluenced by Spanish enterprise, which chiefly is directed here to monopolise Government contracts and the carrying and coasting trade, and depending, therefore, chiefly, for foreign supplies and native returns, on native industry and fereign houses, the Philipines, while principally trading with England and the United States, extend their relations to China, the western coast of North America, Australia, India, France, Switzerland, and Germany. Yet, notwithstanding the large proportion of commercial resources which are cultivated, and are cultivable in the distant divisions of these possessions, notwithstanding the aggregations of population we have enumerated in those provinces remote from this capital, and testifying the existence there of commercial elements, and an industrial and commercial spirit, and notwithstanding that, for nearly five months in the year, those northern and southern divisions, have alternately their commercial relations with Manila, and supplies of foreign manufacture, and exports of native produce suspended by the opposing monsoons, which impede nearly all navigation with them; the foreign trade of the Philipines is, at present, confined by law to the port of Manila; here, alone can come from abroad, to be discharged for distribution throughout these possessions, the manufactures of Great Britain, and other countries, and here have to be brought from their remotest provinces, for purchase at Manila by foreign merchants, every exportable article of native industry and produce.

PILCHARD. The catch of pilchards varies considerably. About 25,000 hogsheads of fish are shipped annually on an average, but as many as 100,000 were cured in 1845. There is a considerable local consumption in Cornwall, and the remainder is exported, for but few find their way to other parts of the kingdom.

The value of the pilchard fishery may be inferred from the following state-

ment of exports:-			
Hhds.	Hhds.	# Hhds.	 Hhda.
1888 . 9,024	1887 . 15,884	1841 · 9,605	1845 . 29,986
1834 . 25,034	1838 1 7,627	184220,714	1846 - 84,353
1835 - 23,314	1839 . 12,834	1843 . 8,820	1851 . 26,748
1976 . 18718	1 1840 . 98.810	1844 _ 18,950	

The price has fluctuated to an equal extent during the same period, having ranged from 33s to 60s for winter fish, and from 35s to 70s for summer fish.

PIMENTO. All the pimento which arrives in Great Britain comes from Jamaica, and is the produce of Engents pimento. An inferior Mind (E. acris) with larger berries, grows in the island of Tobage, and is occasionally imported into France. Another species (E. pimentoides) is stated to yield an evate berry containing similar useful properties. In 1850, 1022 tons of pimento were imported, and in 1855, 2115 tons, of which 1200 tons were re-exported, and 259 tons taken for home consumption; the residue remaining in bond. The duty of 5s per cwt. was repealed in 1860.

5s per cwt. was repealed in 1860.

PINE-APPLES. Scarcely a steamer now arrives from the West Indies or from the West Coast of Africa, without bringing boxes of this delicious fruit. But a special trade has been opened-up of late years with the Bahamas, where the cultivation of the pine-apple has been extensively entered upon on many of

the low out-laying cays or islets.

It was first commenced in 1842, when a small quantity of the fruit was shipped from the Bahamas to Liverpool. The trade now, however, chiefly centres in London, and ten or twelve vessels arrive during each senson freighted with

this fruit, each cargo comprising from 20,000 to 40,000 pine-apples. These meet with a ready sale, owing to the large demand for preserves and confectionary purposes. The trade is carried on by sailing vessels, as steamers were found to heat and ripen the fruit too quickly. The culture has been much improved, and better prices are obtained by the growers owing to the competition for the British and American markets.

About thi ty vessels are constantly engaged in carrying fruit to New York from the West India Islands. In 1854, twenty cargoes of pine-apples, averaging 80,000 dozen per cargo, were imported there from Cuba, 20,000 dozen from St Bartholomew, and 200,000 dozen from the Bahamas Islands.

PLATE AND PLATED WARES. 3000 ounces of gold and 400,000 ounces of silver pass annually through the Assay-office, and many more thousand ounces of the precious metals are worked-up into small ornaments not subject to duty. The average amount received for duty on gold and silver plate, in the United Kingdom, in the three years ending with March, 1859, was £73,891 per annum. The duty on gold plate stamped being still 17s per ounce, and on silver plate 1s 6d per ounce. The declared value of the gold and silver plate of British manufacture exported in 1858 was £74,027 (158,297). ounces), and of plated wares, £107,476. The silver plate imported in the same year was 48,043 ounces, worth at 5s per ounce, £12,011. It is subject to a duty of 1s 8d per ounce since June 1853.

PLUMBAGO. The foreign imports of this mineral substance are now largethe receipts in 1858 were 2881 tons, of which two-thirds were received through Hamburg, and 860 tons from Ceylon. The average shipments from Ceylon are about 1000 tons per annum; and the price £9 to £9 10s per ton.

POLICY OF INSURANCE. The stamp duties chargeable upon Life Policies

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	Where the sum tional part		shall not e	xceed £500	, then i	for every £	50 and ar	y frac-		đ. 6
	And where it at	all exces	d £500, an	d shall not	exceed	£1000, the	n for eve	FY £100	_	
	and any fr				•			-,	1	0
	And where it a	hall exce	d £1000, t	hen for eve	ry £10	na bra 000	y fraction	nal pert	-	•
	of £1000	-	- 1	-	-	-	•	-	10	0
7	he stamp dut			rine poli	<i>ries</i> 18	-				
	When the prem	ium is 10	e -	-	•	•	•	-	0	3
	When it is above	re los and	i not exce		-	-	-	-	0	6
	••	20s	••	30s	-	-	-	-	1	0
	**	30s	**	40s	-	-	-	-	3	0
		40s	"	50e	-	-	-	-	3	0
	•	50s	11	-	-	-	-	-	4	0
	Time policies id	or six mo	aths	-	-		-	-	2	6
	Above that peri	iod	•	•	-		-	-	4	0

The net produce of the Revenue from stamps on Insurance Policies in the year ended 31 March, 1859, was as follows: Fire Insurance. Great Britain Marine Insurance. 284,636

Ireland . 64,303 . £1,402,535 £285,294 United Kingdom .

PORTO RICO. A West Indian possession of Spain. The area of the island is 3700 square miles; the population in 1855, 500,000, of whom 35,000 were slaves. The import and export duties and tonnage dues average a quarter of a million sterling per annum. The entries and clearances average 1300 vessels, and 165,000 tons. About 280 British vessels, of 35,000 tons, are employed in the trade. The value of their cargoes in 1857 was £172,071; the imports and exports average about £1,000,000 sterling. The exports in 1835 consisted of 101,437,866 lbs. of sugar, 13,642,264 lbs. of coffee, 33,716 casks of molasses, 4100 puncheons of rum, 2,476,687 lbs. of tobacco, 237,500 lbs. of cotton, 4425 head of cattle, and 802,762 lbs. of hides.

The exportation of sugar from Porto Rico since has been as follows:-1859 . 91,700,000 lbs. | 1858 . 121,300,000 lbs. | 1857 . 81,000,000 lbs. In tobacco there has been a great falling off. The shipments were in 1859 . 2,825,000 lbs. | 1858 . 4,900,000 lbs. | 1857 . 4,025,00 1857 . 4,035,000 lbs.

PO8 -

PORTUGAL. The area of the five provinces of Portugal proper is 35,400 English square miles. The population in 1854 was 3,499,121 souls, or 98.8 to the square mile. The revenue of the kingdom in 1857, including Madeira and the Azores, was £2,867,875, and the expenditure £3,957,261; the public debt in 1855 was £21,384,538.

The sailing vessels which entered Portuguese ports (including the Azores and Madeira), in 1854 were 2790 ships of 202,988 tons, manned by 20,925 seamen; and 353 steam vessels, of 134,960 tons, and carrying 12,838 men. The British flag is the second in importance of the national vessels in the trade. The entries of British sailing vessels with cargoes were 434, measuring 62,097 tons, and about the same number in ballast. Looking at the shipping trade of the principal ports, we find that of 851 vessels which entered Lisbon in 1857,358 were British, and of 1072 that entered Oporto in 1855, 187 were British. The value of the imports into Portugal in 1854 was £4,171,269, and that of the exports £3,245,925. The following shows the value of the British trade with Portugal:

-		Imports	from.	Exports to.			Imports from	L	Exports to.
	C	omputed		Declared Value.			omputed Val		Declared Value.
1849	•	-	-	£979.597	1855	•	1,962,044	-	1,350,791
1850	-	-	-	1,029,204	1856	-	2,164,090	•	1,455,784
1851	-	_	-	1,048,356	1857	-	2,148,723	-	1,458,321
1852	-	-	-	1,104,213	1858	-	1,079,775	•	1,432,238
1853	•	-	•	1,210,411	1859		•	•	1,306,449
1854	•	£2,101.1	26 -	1.370.603					

POSTING. In lieu of the duties under this head, mentioned at p. 541, the following duties are payable by 16 and 17 Vict. c. 88, on licenses:—

following duties are payable by 16 and 17 Vict. c. 88, on licenses :—		-, -		
Where the person taking out such license shall keep at one and the same time to let for hire one horse or one carriage only	-	10		
And where such person shall keep any greater number of horses or carriages—	•	10	U	
Not exceeding two horses or two carriages	12			
Not exceeding four horses or three carriages	20	0	0	
Not exceeding eight horses or six carriages	30 40 50	0	0	
Not exceeding twelve horses or nine carriages	40	0	0	
Not exceeding sixteen horses or twelve carriages	50	0	0	
	60	0	0	
	70	0	0	
Exceeding twenty horses, then for every additional number of ten horses, and for any additional number less than ten over and above twenty, or	••			
any other multiple of ten horses, the further additional duty of Persons intending to let horses for hire must make entry of their stables, coach- houses. &c with the proper officer of excise duties. Penalty 100f for letting horses		U	0	
for hire without license, or keeping a greater number of horses, &c., than license authorizes (s. 16).				

In 1859 the produce of these licenses was as follows:-

	England and Wales.	Scotland.	Ireland.
To let Horses and Carriages for hire To run Stage Carriages, £3. 3s per Ann. Ditto, Supplementary £1. ditto	£ 118,266 9,525 240	£ 15,307 1,112 15	4,285
To keep Hackney Carriages in London at £1 per Ann. Licenses for short periods	5,646 9,408	1,524	8,559

POST-OFFICE. The great extension of our home and foreign trade and commerce, the large amount of emigration, the increased facilities afforded by the extra deliveries, and the extension of ocean mail communications, have served to give a very great impetus to letter communication. Within the last twenty years there has been a sevenfold increase in the number of letters delivered in the United Kingdom.

In 1859 the number of post-offices in the United Kingdom was 11,412, of which 825 were head noteffices and 10,527 when and offices.

In 1859 the number of post-offices in the United Kingdom was 11,412, of which 825 were head post-offices, and 10,587 sub-post-offices. To these must be added 1958 road letter-boxes. Thus the whole number of public receptacles for letters is now 13,870, as compared with 4518 before the establishment of penny

postage. Instead of possessing as formerly only one past-office at which smalls are despatched and received, and letters sent out for delivery, London has now ten such post-offices. The postal district system has now been in speration in the metropolis to a greater or lesser extent more than three years. With few exceptions, every resident in London is now within a furloug of a post-office or a road letter-box, and within a quarter of a mile of a money-order office.

At the end of 1859 the Post-office staff comprised the following officers:

I. In the British Isles. Postmaster General, Secretary, Assistant secretaries, and Secretaries for Ireland and Scotland, 5; other superior officers, such as heads of departments, chief clerks in metropolitan offices, &c. 18; surveyors, 15; postmasters, 11,398; clerks, &c. 1594; mail guards and porters, 209; letter carriers, messengers, &c. 11,363; Marine mail officers, 7; total, 24,669. II. In the Colonies, the posts of which are under the direction of the Postmastergeneral, postmasters' clerks, letter carriers, &c. 129. III. Agents in Fereign Countries, for collection of postage, &c. 65; in all 24,803 persons. Of the above staff, about 1500 belong to the chief office in London, and (including this number) about 8300 to the London district.

The subjoined table shows that the distance over which mails are now conveyed within the United Kingdom by railways, mail coaches, &c., steam-packets, boats, and foot messengers, is about 149,000 miles per day.

	Mails co	nyeyşd b	y Railwi	aya.	Malis co	ibuses,	Mail (di Conches, Carts, &c.
1 659. •	Number of Miles per Week Day.	Average Charge per Mile.	Maximum.	Minimum.	Number of Miles per Week Day.	Average Charge per Mile.	Maximum.	Minkows.
England	27,506	s. d. 0 8†	a d. 8 6†	d.	19,024	1	e d 0 9	Exemption from Tolls.
Ireland Scotland	8,267 4,831	1 3 0 101	4 1	1	8,950 4,962	2 24	0 ef	1
United Kingdom -	85,604	0 91	4 1	à .	32,9 36	와	0 9	Exemption from Tolls.

	Maile	convey	ed on F	oot.	Pack		loats betw aces in th	
(continue d)	Number of Miles per Week Day.	Average Charge per Mile.	Maximum.	Mistmam.	Number of Miles per Week Day.	Average Charge per Mile.	Maximum.	Minimum.
England Ireland Scotland	49,808 8,362 10,799	d. 11 11	व अंश	di T	1,184 63 1,621	a. d. 1 64 0 1 0 44	s. d. 5 64 0 54 1 104	4
United Kingdom -	68,964	14	44	•	2,817	0 9	5 64	ŧ

^{*}The Account was taken on the 1st December.
† In calculating these amounts, the payment to the Chester and Holyhead Railway Company
has been omitted, as only part of that payment is for postal service, the remainder being of
the nature of a Government grant to increase the general facilities for communication with

The following table shows the number of letters delivered in the United Kingdom, in 1856 and 1859, and the proportion of letters to population in 1859

		Number of Letters in 1856.	Number of Letters in 1859.	Proportion of Letters to Population.
England Ireland Scotland		338 millions 42 ,, 48 ,,	446 millions 47 ,, 52 ,,	22 to each person*. 7 to each person. 16 to each person.
United Kingdom	-	478 .,	645 ,,	18 to each person.

As compared with 1658, the total for 1859 shows an increase of 22 millions: and as contrasted with the year previous to the introduction of penny postage (1839), an increase (omitting franks) of 469 millions; making the present number of letters rather more than seven-fold what it was in 1839. In the London Office alone, counting the letters both inwards and outwards and counting forward letters, there has been an increase in the last five years of more than twelve millions.

It is a striking fact that the number of London District letters, that is, of letters posted in the London District for delivery within the same,—the old twopenny post,—is now equal to the total number of letters, whether general or local, posted twenty years ago in the whole of England and Wales, London inclusive.

The number of letters given in the foregoing statements includes those from beyond sea. The great bulk, however, are inland; the colonial and foreign forming less than one-fiftieth of the whole.

The number of registered letters in 1859 was nearly 1,400,000, or one registered letter to about 400 ordinary letters. This number shows an increase of about 6 per cent. on the previous year.

The following table continues down the return given at page 543:—

Year.	Gross Revenus.	Cost of Management.	Net Revenue.	Postage Charged on Government Departments.
	£	E	£	
1841-45†	1.658.214	1,001,405	656,809	112,468
1846-501	2,143,717	1,304,772	838,944	110,798
1851-55	2,569,836	1,441,884	1,128,502	157,008
1856	2,876,127	1,673,556	1,202,561	154,229
1857	8,016,147	1,718,476	1,804,671	185,517
1858	8,109,939	1,770,554	1,830,385	188,631
1859	8,299,825	1,835,958	1,445,872	149.882

From this return it will seem that the net revenue is fast approximating to the amount at which it stood before the introduction of the uniform penny postage, namely, £1,633,764 in 1839.

The number of newspapers delivered in the United Kingdom in 1859 was about 70,500,000.

The number of letters returned to the writers owing to the failure in the attempts to deliver them, was about 1,900,000. This is equal to about 1 in 280 of the whole number of letters.

^{*} In Glasgow the proportion is as high as 22 letters to each person, in Liverpool 27, in Manchester 32, in Dublin 34, in Edinburgh 35, and in London 43.

† Average of 5 years.

Nearly half the non-deliveries was owing to the letters being addressed either insufficiently or incorrectly; more than 11,000 having been posted without my address at all.

Owing to the same cause, about 470,000 newspapers also were undelivered;

being one in 150 of the whole number.

The average postage of an ordinary inland letter continues to be about 1]4, and the average postage of a book packet rather more than 2d.

Excluding official packets, the average weight of an inland letter continues to be rather more than a quarter of an ounce; that of a colonial letter, rather more than one-third of an ounce; and that of a foreign letter rather more than a quarter of an ounce.

The average weight of an inland newspaper passing through the Post Office is about two ounces and a half; that of a colonial newspaper, rather more than two ounces; and that of a foreign newspaper, rather more than an ounce; the average weight of a book packet being about five ounces and a quarter.

MONEY ORDERS.—The whole number of Money Order Offices is now 2481, exclusive of Colonial Money Order Offices in connexion with the United Kingdom.

The following tables, with that on page 236, show the number of Money Orders issued during the year 1859, with other particulars.

	Number of Money Orders issued.	Amount.	Increase per Cent.	Com- mission.	Profit after deducting Expenses.	of	Mon	ted to	rdem o
England and Wales Ireland Scotland United Kingdom	5,932,133 494,828 538,147 6,969,108	£ 11,258,057 891,675 1,001,298 13,250,930	5 4 2	£ 99,250 8,188 8,972 116,369	£ 27,780 Loss 684 2,019 29,115	l to	Ne over;	arly 7 3 p 13 6	ernons ""

Annual Increase in the Total Amount for which Money Orders were issued in the last five years, as compared in each case with the Amount in the year preceding.

Year.	England Wald	d and	Ire	land.	8	cotla	nd.	Unite	ı Ki	ngdom.
1855 1856 1857 1858 1859 Averag	7 7 3 8 3 8 4 9 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5		About 9 ,, 7 ,, 1 ,, 4 ,, 4		About	44 1 54 54 84 2	per cent.	About	51 p 71 21 4 4 4	er cent

The tables on the opposite page, from the last annual report of the Post-master General, furnish some useful statistics for reference and comparison.

ESTIMATED NUMBER of CHARGEARLE LETTERS delivered in the UNITED KINGDOM in the year immediately preceding the first general Reduction of Postage on the 5th Day of December 1839, and in the Years subsequent thereto; also (in the first Year) the number of Franks.

				I		I		1		-		7		ľ
		Delive	Delivered in England and Wales	pus p	Vales.			m SL				uni M		een Se
Years.	By Country Offices.	bet ennum per cent Incresse	In London District, exclusive of Local Letters.	Incresse per cent. per annum.	Local Letters in London District.	Increase per cent. per annum.	Total in England and Walca.	Increase pa	Total in Ireland.	Incresse per cent. per ann	Total in Scotland.	Incresse pe cent. per ann	Total in United Kingdom.	Increase p
Letters, 1839 -	١	ı	١	ı	13,000,000	1	59,963,000	1	8,302,000	ı	7,623,000	1	75,908,000	1
Franks, 1839 -	ı	1	1	ł	1	1	5,172,000	ı	1,066,000	ı	336,000	ı	6,563,000	ı
Letters, 1840 -	88,071,000	1	23,560,000	ı	20,372,000	ı	132,003,000	8	18,211,000	181	18,554,000	143	168,768,000	122
Average of 5 years														
1841-45	2	_	31,587,000	6	25,838,000	35	179,183,000		24,226,000	6	24,419,000	ま	987,777,000	_
1846-50	Ä		44,089,000	3	84,888,000	4	258,622,000		34,757,000	•	33,627,000	#	327,006,000	
1851-65	ä		54,043,000	3	43,168,000	â	829,788,000		89,384,000	**	40,999,000	*	410,166,000	
Letters, 1856 -	Š		64,961,000	6	47,895,000	4	388,310,000		41,851,000	E	48, 233, 000	•	478,394,000	
1857 -	291,636,000		66, 233, 000	•	52,134,000	3	410,008,000		42,806,000	3	51,612,000	-	_	
	300,506,000		68.961.000	•	58,404,000	2	497.871.000		44, 208,000	2	50.795.000	1100	_	
. 1859	816,649,000	*	69,295,000	-	59,971,000	*	445,916,000	#	46,817,000	•	52,063,000	ã	544,796,000	*
			The second second											

ESTIMATED NUMBER of BOOK PACKEYS AND CHARGEABLE NEWSPAPERS. delivered in the UNITED KINGDOM since 1855.

.18	Second Sec	294 2,826,000 21 25,125,000 24, 100, 104, 200, 105, 2,900,000 5 28,284,000 128, 178, 2,900,000 5 28,121,000 138
	Total in Ireland	1,766,000 8,284,000 8,535,000 2,966,000
ΩO.	Increase per cent the previous Ye	1222
	Total in England and Wales	16,487,000 19,286,000 22,059,000 26,167,000
	Increase per cent. on the previous year.	35 164 164
Wales.	Local Book Packets and Chargeable Newspapers in London District.	1,904,000 2,495,000 2,567,000 2,961,000
pue p	Increase per cent. on the previous year.	1282
Delivered in England and Wales.	In London District, ex- clusive of Local Book Packets and Chargeable	1,197,000 1,405,000 1,919,000 2,187,000
Delly	Increase per cent. on the previous year.	1222
	By Country Offices.	12,396,000 15,386,000 17,573,000 20,019,000
	Усыл.	1856 1867 1858 1858 1869

EB "Chargeable Newspapers" are meant Newspapers not bearing the impressed newspaper stamp, and the postage of which is consequently paid in postage stamps or money.

Extracted Number of Free Newsparers delivered in the United Kingdom since 1816.

	· PRO T			
.\$t	Decrease per cer on the previous Year.	12		
	Total in United Kingdom.	53,790,000 51,616,000 50,038,000 49,318,000		
.30	Decrease per cer on the previous Teax	المحتمدا		
	Total in Scotland. 7,876,000 6,704,000 6,704,000			
7)1	Decresse per cer Zesr.	7		
	Total in Ireland.	10,066,000 9,268,000 9,236,000 9,164,000		
9	Decrease per cer on the previous Year,	। संस्य		
	Total in England and Walea	35,848,000 35,003,009 34,118,000 32,638,000		
los	Increase or Decrease per cent. on the previous Year.	# Inc. 14 Dec. 16 Inc.		
Delivered in England and Wales.	în Lendon Distriot.	4,488,000 4,456,000 4,404,000 5,107,000		
ered in Eng	Decrease per cent. on the previous Year.	। अज्ञ		
Delly	By Country Officea.	31,423,000 30,547,000 29,714,000 28,531,000		
	-	1111		
	Years.			
		1856 1857 1858 1858		

* By "Free Newpapers" are meant all British Newpapers and Publications bearing the despressed sessions and all merupapers from abroad upon the made in this Country.

NUMBER and Amount of Money Orders Issued in the United Kingdom since 1838.

	Tear	ENGLAND A	ENGLAND AND WALES.	Zen)	(resam)	Boom	SOUTLAID.	TOTAL, UNITED	nd Amedont.
		Number.	Amount	Number.	! Amount.	Number.	Amount	Number.	Ameunt
1839 1840 Average of " 1856" 1887 1898	7 Five Years, 1941-46	142,738 2070,977 2,070,977 2,385,869 4,393,046 5,281,746 5,211,203 5,674,441	4, 911, 985 940, 063 902, 937 4, 911, 885 6, 684, 176 10, 1099, 306 10, 10, 881, 901 11, 835, 097	80,016 68,507 196,796 847,604 407,606 461,728 436,720 486,520	47, 29,5 47, 29,5 37, 167 38,6,5,18,1 686, 18,1 886, 18,9 887, 3,9,8 891, 978	16,183 11,026 210,068 274,197 418,909 483,023 519,875 599,735	26.766 90,090 890,990 759,998 899,858 899,858 980,878 980,878	188,931 867,737 8420,636 4,667,737 7,919,549 6,919,769 6,919,769 6,919,769	8. 313,134 313,134 960,976 4,937,996 7,954,038 11,605,668 13,160,573 13,663,105 13,663,105

Total Profit in each of the last ten years:-

			Profit.	1			Profit.
1850	-	-	3,238	1856	-	-	20,252
1851	-		7.437	1856	-	٠.	22,674
1852	-	-	10,689	1857	-	-	24,175
1858	-	-	14,149	1858	-	-	25,936
1854	-		16,167	1859	-	-	29,115

The increase in the number of Money Orders in 1859 was nearly 300,000,

The increase in the funder of money Orders in 1838 was awary 300;000, which is at about the same rate as in the previous year.

The Money Order system, though now productive of a large profit in England and Scotland, is still carried on at a loss in Ireland.

In June 1859, the Money Order system was extended to Canada, between which time and the end of the year nearly 4000 Orders were issued in Canada on the United Kingdom, and about 1150 in the United Kingdom on Canada; the average amount of each Order being rather more than £3.

It was thought purglent in the first instance to make the commission rather

It was thought prudent, in the first instance, to make the commission rather high, viz., fourfold for that of an inland Money Order, but the charge is about to be lessened.

This enlargement of the Money Order system has worked very satisfactorily, and will soon lead to its extension to other colonies. Such an extension would be productive of much good; would save much money that now probably runs to waste; would afford great relief to many weak or aged persons, separated by the broad ocean from the younger and more vigorous members of their family;

and would materially promote self-supporting emigration.

By an Act recently passed, the duty of entering into contracts for the Mail Packet service, and of superintending the execution of these contracts, has been transferred from the Admiralty to the Post Office.

A STATEMENT showing the PAYMENT made for each of the Fourier and COLONIAL PACKETS under Contract with the BRITISH GOVERNMENT; the estimated Sea Postage on the Correspondence conveyed by each Line of Packet; the Profit or Loss of each Line; the Cost of Sea Conveyance per Ounce of Letters, and per Pound of Printed Matter.

PACKETS.	Contract Payments.	Sea Postage.	Profit.	Loss.	The Cost Sea Conveyance per Cunce of Letters, and per Pound of Printed Matter.*
D	£	2	£	A	4 4.
DOVER AND CALAIS) and DOVER AND OFFERD -)	15,500	76,000	60,500	-	-
The estimate of sea posts (not consecutive) we postage on correspon ing the sums-repayal in this as in all other duce of printed matte pondance, passing t Europe and foreign o credited to the Amer	dence between the to foreign cases has been. It does hountries or	en May ancen this countries, sen taken to not include to United E	d December ntry and the last t	r 1859. In Continent of the Continent of the possible of the possible of the whole of the continent of the c	t includes the t, after deduct- nd rate, which id half the pro- tage on corres- Continent of
Promesular	20,500	2,000		17,500	9 88
This estimate is based or between May and De	an accour	it of five o	utward and	l six inwar	d mails, taken

[•] In dividing the Cost of Conveyance, it has been considered that a pound of Printed Matter is equal in point of cost to an ounce of Letters.

PACKETS.	Contract Payments.	Sea Postage.	Profit	Lon.	The Cost of Sea Conveyance per Ounce of Letters, and per Pound of Printed Matter.		
North American	£ *191,000	£ 112,000	£	£ 79,000	s. d.		
This estimate has been ba taken between May s		count of se	•	d and seven	inward mails,		
Of this sum, £14 Halifax and St. Nassau.	700 is paid	for the line					
West Indian Brasilian	293,500	78,000	-	215,500	4 8		
This estimate has been based on an account of six outward and six inward mails, as regards the West Indies and the Pacific, and on an account of four outward and three inward mails as regards the Braxils. The whole account was taken between May 1869 and January 1860.							
WEST COAST OF AFRICA -	\$0,000	4,000	-	26,000	6 1 11		
This estimate is based on an account of three outward and four inward mails, taken between May 1869 and January 1860.							
THE CAPE OF GOOD HOPE	82,400	7,500	1 -	24,900	2 44		
This estimate is based on an account of two outward and three inward mails, taken between June 1859 and January 1860. Part of the loss on the service is charge able to the colony.							
Australian	97,000	29,000	-	68,000	2 4%		
This estimate is based on an account of three mails to Australia, and of three mails to and three from the Mediterranean and the Mauritina. The sum of £97,000 is a molety of the contract price, the other molety being chargeable on the Australian colonies, which retain the produce of the mails sent to this country.							
East Indian	168,000	84,000	-	84,000	1 41		
This estimate is based o between May 1859 payable by the Impe the East Indian Gove	and Januar erial Govern	y 1860. T	he sum of	£168,000 i	s the amount		

POTATOE. It was estimated in the agricultural journals a few years ago, that there were about two million and a quarter of acres under culture with potatoes in the United Kingdom; if these averaged as much as five tons to the acre, this would give 11,250,000 tons as the entire annual produce, and at £3 per ton these would be worth £33,750,000. But besides this large amount of home produce we import a considerable quantity, particularly of early grown from the Continent. These imports vary considerably, in some years, as in 1856, reaching 1,721,953 cwt.

POULTRY. Under the head of Egos we have already given details of the more important of the poultry products. The average annual value of the poultry produced in the kingdom has been estimated at £400,000. Three and a half-million head of poultry of all kinds are sold in the two metropolitan markets of Leadenhall and Newgate yearly, and it is considered that about nine or ten million head of poultry of all kinds are killed annually in the country, although this can be merely conjectural opinion.

although this can be merely conjectural opinion.

PRINCE EDWARD ISLAND. The population of this British American colony had increased in 1857 to 71,496 souls. The revenue in the same year amounted to £27,636, and the expenditure to £32,348. The number and tonnage of vessels which entered and cleared was-entries 674 vessels, 46,509

tons; clearances 611, of 49,318 tons. The number of vessels built averaged for the three years, ending 1857, nearly 100 a year, in the aggregate about 15,000 tons. The value of those built and exported in 1856 was £141,372. The general exports of the colony in 1857 were to the value of £134,465, and of the imports £260,438. The exports, beside timber and ships, consist principally of agricultural produce and fish.

PROPERTY AND INCOME TAX-See INCOME TAX.

PRUSSIA. According to the latest returns the area of this kingdom is now 107,163 square miles, the population in 1858 was 17,739,913, and that of the

capital, Berlin, 463,645.

In 1852 there were 1,965,462 farms in the kingdom, of which 17,003 were above 378 English acres in extent. The agricultural produce of Prussia in 1851 consisted of 3,674,063 quarters of wheat, 12,020,250 of rye, 3,600,000 of barley, 14,218,125 of cats, and 52,593,750 quarters of potatoes. About 6½ to 7½ million gallons of wine are made. The quantity of land under culture with the vine being 39,000 acres. The number of live stock in the kingdom in 1849 was 1,575,417 horses; 7475 mules and asses; 5,371,644 cattle; 16,296,928 sheep, of which 4,452,913 were merino, and 7,942,718 cross breed; 584,771 goats, and 2,466,316 pigs. The wool produced by the native sheep amounted to 35,853,242 lbs. The total value of the buildings insured in the fire offices in 1849 was £184,548,633. The total number of vessels that entered at ports in Prussia in 1854 was 7730, measuring 1,379,118 tons, of which 4794 vessels and 829,606 tons were with cargoes.

In 1858 the entries consisted of 9945 vessels and 828,720 tons, and the clearances of 10,058 ships and 863,740 tons; of these movements 1023 vessels and 127,940 tons were steamers. About half the shipping trade is under the national flag and half foreign.

The mercantile marine of Prussia consisted in 1859 of 1081 vessels (of which 49 were steamers) registering 334,254, manned by 10,271 scamen, and 561 coasters of 14,432 tons employing 1303 men.

PORTS. Dantzic. The number of ships that entered this port in 1857 amounted to 1888, of which 348 were British; those cleared to 1843, 338 being British. The traffic by steam is daily increasing, Hull and London sending their boats weekly, besides many from several other countries. The Vistula is now continually traversed by such vessels, both paddle and screw. The exportation of grain in 1857 was 337,031 quarters of wheat, 132,692 quarters of rye, 25,370 quarters of barley, besides small quantities of pulse, oil-seeds, &c.

Stettin. The population of this town in 1858 was 53,103. The value of the imports in 1857 was £4,208,636, and of the exports £2,722,451. The value of the timber exported from Stettin in the five years ending 1857 was £1,304,702, of which about half came to England. Since the abolition of the Sound dues the imports generally have largely increased, especially of yarn and cotton, iron, coals, soda and potash, palm and cocce-nut oil. Stettin is the principal port for foreign herrings. The receipts in the three years ending 1857 averaged 151,000 barrels. The exportation of corn from this port in 1857 was unprecedented, 896,335 quarters, being 267 per cent above the average of the seven preceding years. The trade, however, of the following years, 1858 and 1859, was remarkably dull. The tonnage that entered in 1858 was 480,872 tons. The import of yarns, linen, cotton and wool, from Great Britain showed, however, a great increase, amounting to 107,548 centals or cvt.

Memel. The number of ships that entered and left this harbour in 1857 was—entries 885 of 269,242 tons; clearances 811 vessels of 236,974 tons. This number was considerably below the average. Of the clearances 586 vessels and 193,780 tons left for Great Britain. The number of vessels owned in the port was 80 of 37,110 tons—5 being steamers of 50 or 60 horse-power.

Konigsberg. The population of this town in 1858 was 80,000. Steam

dredging machines are now employed in the harbour; and a better depth of water has been obtained. The depth at Pillau is about 23 feet. The rivers Preger and the Naff channel have been kept at an even depth. The vessels arrived at Pillau in 1857 were 1305 of 176,962 tons, of these 163 ships were British. At Konigsberg the arrivals were 1115 sea-going vessels, and 3000 coasters and lighters, and 173 barks and rafts from Russia and Poland. The sea-going ships owned in Konigsberg in the early part of 1858 were 29, measuring 9354 tons.

FINANCES. The revenue of the kingdom of Practic, in 1858 was £13,436,765, and the debt £86,722,560.

PRUSSO-GERMAN CUSTOMS' UNION, OR ZOLLVEREIN. The appended tables will serve to bring down the statistics of the trade and commerce of the German Customs' Union to the present time, and will be found to contain a mass of very useful information. It may be observed here that the beet root sugar manufacture which centres principally in Prussia is a large and important one for local supply. In 1858 there were in the Zollverein 238 factories which operated upon 22,000,000 cwts. of beet root, and produced therefrom 1,540,566 cwt. of sugar, on which £306,812 duty was paid.

TOTAL REAL VALUE of the Impores, Expones and Transit of the Greman Customs' Union in the undermentioned Years.

Years.	Imports.	Exports.	Transit.	Total.
	£	£	£	£
1839	22,895,865	27,800,007	8,176,329	58,872,201
1840	25,166,775	27,418,976	8,714,090	61,394,841
1841	27,255,151	28.391.144	8,191,999	68, 638, 294
1849	28,300,749	24,440,673	8,248,703	68,985,124
1843	31,810,577	24,502,381	8,496,715	65,809,671
1844	81,439,139	26,303,941	11,211,599	68,954,679
1845	82,953,964	26,705,348	9,568,817	69,228,129
1846	38,223,217	26,614,672	10,491,837	69,329,726
1850	27,248,874	25,942,917	11,733,663	64,924,754
1851	28,825,711	26,773,070	19,560,697	68,159,478
1852	29,472,246	27,763,635	13,480,109	70 665,990
1863	80,510,309	37,886,965	15,826,418	84, 173, 685
1854	40,367,858	50,128,960	18,296,806	108,788,624
1855	47.364.731	46,285,111	25,055,400	118,690,943

TOTAL REAL VALUE of the Imports, Exports and Transit of the ZOLLVE-REIE by way of each frontier country in the Year 1851.

Frontier Country.	Imports, including Transit.	Exports.	Transit.
	£	£	
Russia and Poland .	2,672,088	1,175,118	921,442
Austria	5.418.464	8,435,594	8,701,001
Switzerland	4,268,420	2,743,752	1,242,153
France	1,024,687	733,169	165.816
Belgium	4,014,463	2.261,703	385,130
Holland	6,883,965	2,995,056	1.831.872
Hanover	5,506,436	4 203,338	2,176,184
Mecklenburg	286,255	205,605	26,391
North See	7,266,528	5,350,176	1,090,647
Baltic :	8,179,528	8,669,558	1,090,087
Total	40,520,867	26,773,064	12,560,693

POPULATION of the several STATES of the ZOLLVEREIN, the AMOUNT of DUTY raised, and the SHARES of the NET RECEIPTS in RATIO to the POPULATION, in the Year 1854.

States.	Population.	Duty Received.	Share of Net Receipts.
Prussia	17,286,484 192,632 4,565,266 1,987,613 1,840,932 1,733,268 1,354,768 727,323 865,480 1,024,929 247,461 228,106 429,060 74,867	Thalers. 14,993,636 77,061 1,104,570 1,875,124 1,761,386 303,891 698,423 267,175 439,009 324,863 260,714 165,773 61,940 823,990	Thalera. 10,259,747 112,589 2,667,096 1,186,559 2,092,522 1,012,601 791,477 424,918 505,628 611,859 146,603 260,417 250,664
Total Thalers	89,559,178	23 159,575 2,478,785	20,322,625 8,048,393

Oldenburg and Hanover were admitted into the Union on 1st January, 1854.

Area, Population, and Value of the Customs Dues of the States of the Zollverein according to the latest returns. The area comprises only the parts of the Union subject to the Customs frontier, and not their territorial limits.

States.	Square Miles.	Population in 1858.	Customs Dues. 1857.	Customs Dues, 1858.
Prussia Luxemburg Bayaria Saxony Hanover with Schamburg Lipp Wurtemburg Baden Electoral Hesse Ducal Hesse Thuringian Union Brunswick Oldenburg Nassau Frankfort Total	5209 47 1396 272 708 363 275 203 154 237 63 97 85 2	18, 107, 274 192, 196 4, 621, 379 2, 122, 148 1, 865, 104 1, 699, 988 1, 334, 052 699, 798 862, 999 862, 999 862, 999 862, 999 862, 999 862, 999 862, 999 862, 999 863, 771 945, 777 80, 611 33, 542, 467	Dollars, 16,690,842,90,185,1,083,968,2,639,082,2,187,797,406,499,283,426,567,232,330,286,118,259,460,65,538,912,297,20,682,161	Dollars. 17,529,546 100,936 1,803,667 2,678,675 2,574,424 440,705 1,046,936 308,846 604,813 381,325 291,720 378,445 81,931 996,327 28,612,171

DECLARED VALUE OF BRITISH and IRISH PRODUCE and MANUFACTURES exported to Germany, Holland, and Belgium in the following years:

т	owns.		1845.	1850.	1855.	1859.
Prussia Germany Holland Belgium	:	:	£ 577,999 6,517,796 8,439,035 1,479,058	£ 424,480 7,032,866 8,542,632 1,136,237	£ 1,100,021 8,777,775 4,558,210 1,707,693	£ 1,492,541 10,285,121 5,379,794 1,474,873
	Total	•	12,013,888	12,136,215	16,148,699	18,632,329

From the above figures it will be seen that within the last ten years our trade with Germany has increased more than 50 per cent.

QUICKSILVEB. There is a largely increased consumption of this metal in the arts and in the gold producing countries. The consumption in California is estimated at 3000 flasks (of 76 lbs. each) annually. Formerly the principal supply of quicksilver was obtained from Spain, but of late years valuable mines of the cinnabar, or ore of mercury, were found in California, and in the five years ending with 1858, the exports were 25,000 flasks annually. The principal mine was, however, closed by an injunction of the Government in Oct. 1858, and hence only 3400 flasks were shipped in 1859. The quicksilver received here, averaging between 2,000,000 and 3,000,000 pounds, is chiefly for transshipment to the Continent, India, and South America.

RAGS. The aggregate quantity of rags annually collected in the kingdom, with those imported from abroad, exceeds 70,000 tons in weight, worth at least £1,500,000. The import of foreign rags suitable for paper-making has not varied much for the last twenty years, averaging still about 10,000 tons per annum. The imports in 1858 were 11,379 tons, of the value of £246,133, of which 4048 tons came from Prussia, 1668 tons from Russia, 3502 from Germany and Holland, 1118 tons from Italy, and the remainder from Australia, the Rast Indies, and other places. It takes 100 tons of rags to make 70 tons of paper.

The importation of rags into the United States for the purpose of paper-making is a great deal more extensive than most people would imagine. During the year 1857 America imported 44,582,080 lbs., valued at 1,448,125 dollars, and making 69,461 bales; 35,591 bales were from Italy, and more than one-third are entirely linen, the rest being a mixture of linen and cotton. About 2000 bales were also imported from the free cities of Hamburg and Bremen. France prohibits the exportation of rags, and so does Rome; the few which America gets from Ancona—a Roman province—being by special permission on payment of large fees. Prussia and Germany generally impose so high an export duty on rags as to stop the trade entirely. The exports from Alexandria and Smyrna are chiefly collected in Asia Minor by agents having licence from the Government, and the domestic demand must be supplied before any can be exported. It is the same with Trieste, where only the surplus is allowed to come away. The Trieste rags are collected all over Hungary. New York and Boston receive the largest quantity, and the place that ships the most is Leghorn, in Italy.

The imports of woollen rags in 1858 were 3000 tons, of the value of £28,000.

RAILWAYS. The appended statistical details embrace the latest published returns and information respecting the entire progress of British and Foreign railways.

GENERAL STATISTICS OF RAILWAYS in ENGLAND and WALES, SCOTLAND and IRELAND, in the Year 1858.

	England and Wales.	Scotland.	Ireland.	United Kingdom.
Capital: Paid up to 31st Dec. 1858:— Ordinary Preference Total Length of Lines opened for Traffic, Miles In course of Construction	£. 151,959,920 50,800,322 202,760,242 68,111,401 270,871,643 7,001 775	£. 18,501,677 8,147,969 26,649,646 10 031,354 86,681,000 1,353 130	14,282,440 8,540,424	61,854,547 943,692,398 81,683,179
Passengers Conveyed: Total No. Conveyed Per Centage proportion of Total Passengers Total No. Conveyed Average No. per Mile Per Centage proportion of Total Passengers Total Passengers	15,162,795 2,201 13:08 36,199,873 5,256 31:22	1,983,821 1,525 18 42 2,150,334 1,858	1,155,767 1,023 13-68 8,343.582 2,958 39-58	18,302,384 1,965 13-15 41,693,389 4,476

^{*} Exclusive of Holders of Periodical Tickets.

Passengers conveyed—continued.	England and Wales	Scotland.	Ireland.	United Kingdom.
3rd Class (Total No. Conveyed -	64,568,572	10,647,854	8,929,038	79,145,464
and Average No. per Mile -	9,876	8,184	3,477	8,497
Parlia- Per Centage proportion of				•
mentary (Total Passengers -	55.68	72.00	46.52	56.86
Holders of Periodical Tickets - Total Passengers Conveyed	26,216 115,956,957	6,959 14,788,968	19,387 8,447,774	52,562 139,193,699
Private Carriages Conveyed	45,891	4,984	3,608	54,438
Horses Conveyed	190,490	22,937	18,491	231,918
Dogs Conveyed	238,399	41,092	29,006	308,497
Goods Conveyed:— General Merchandise • Tons	21,687,649	2,895,916	1,071,055	25,654,620
Minerals - Tons	38,298,709	9,040,903	180,064	47,469,676
Live Stock Conveyed* - No.	8,695,296	1,426,592	1,204,118	11,826,006
Average Passenger Fares, per Mile		1 ' '		
Travelled:	2.164	1.704.	1-894.	2·09 <i>d</i> .
2nd Class	1.48d.	1.70d.	1.364.	1·46d.
3rd Class	0.884.	0.88ď.	0.80d.	0.88d.
Receipts from Passengers:				
Total Receipts	2,582,163	250,202	170,472	8,002,888
Proportion per cent. from 1st Class to Total Receipts	1	[1	
1st Class from Passengers -	29-86	27:32	25-89	28-94
Average per Passenger -	40 86d.	30 26d.	85·89d.	39·47 d.
Average per Mile of Mean		اا		
Length of Railways - Total Receipts -	£375 3,104,726	£192 174,885	£151 247,766	£322 8,527,307
Per Cent. proportion from	0,104,720	114,000	24,,000	9,021,001
2nd Class to Total Receipts		1 1	1	
2nd Class (from Passengers -	85.31	19-04	86.75	80.00
Average per Passenger	20·58 <i>d</i> .	19·52d.	17·78d,	20·30d.
Average per Mile of Mean Length of Railways -	£451	£134	£219	£879
Total -	2,905,439	472,598	238,155	8,616,192
3rd Class Per Cent. proportion from 3rd Class to Total Receipts	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,		, ,
and Srd Class to Total Receipts				
Parlia- Average per Passenger	83·10 10.77d.	51.80 1.654	85-78 14-54d	84·85 10·194.
mentary Average per Mile of Mean	10.774.	1000.	11 041	10 154,
Length of Railways	£423	£363	£211	£386
Periodical Tickets	196,853	16,804	16,245	229,902
Total Receipts from Passengers	1,789,181	914,490	672,638	10,876,309
Receipts from Passengers' Luggage and Parcels	574,601	42,805	29,831	646,787
Receipts from Carriages	43,853	8,518	2,851	50,217
Receipts from Horses	116,923	7,868	10,667	135,458
Receipts from Dogs	13,266	1,712	1,165	16,143
Total from Passengers' Luggage and Parcels, Carriages, Horses, and Dogs	1775,709	†58, 9 79	†45 080	†879, 76 8
Receipts from Post-Office Mails -	318,580	58,832	64,915	441,827
Receipts from Goods, &c.:-				
General Merchandise	6,637,585	765,408	808,398	7,711,386
Minerals Live Stock	8,385,122 387,918	692,893	18,046	4,046,061
Total	10,360,625	46,637 1,505,183	66,643 898,087	501, 398 12,258,845
Total Receipts from all Sources -	20,244,095	2,536,984	1,175,720	23,956,749
Expenditure : ‡		1		
Total Working Expenditure (includ-	10 102 904	1 101 500	461 844	11 869 667
ing Compensation) Interest on Loans	10,105,884 8,352,910	1,101,597 480,536	461,544 154,262	11,668, 22 5 8,987,780
Total Expenditure	13,458,294	1,582,183	615,506	15,605,938
Average Working Expenditure per			· 1	
Mile -	1,582-51	875-67	451.75	953-81
Per Centage proportion of Working Expenses to Total Receipts -	50-	44:	40-	49.
Pandusca to roter tracerbra -	•		-v [15

Exclusive of the Midland Railway, from which no Return of Live Stock conveyed has been received.
 † Including a certain amount not distinguished under the separate items.
 † The Expenditure of Railways as stated in this Table is about 14 per cent. less than the actual amount, in consequence of some Railways not having furnished complete Returns.

			England and Wales.	Scotland.	Ireland.	United Kingdom.
Net Receipts, after deduct penditure:—	ing Tol	al Ex-				
Total -	-	•	£6,785,801	£1,004,801	£560,214	£8,850,816
Mileage travelled by Pass	engers :	*		1 ' '		
1st Class	•	-	278,905,486	32,801,387	20,533,711	339,240,564
2nd Class -	-	•	484,435.698	20,122,651		
3rd Class -	-	-	184,542,287		24,273,976	
Parliamentary Class	-		536,980,816		35,733,782	
Total •	-	-	1,563,542,396 	168,787,576	121,285,163	1,858,616,135+
Mileage travelled by Train	8:					
By Passenger Trains	-	•	89,422,377	4,248,590		
By Goods Trains	-	-	23,575,278	5,086,973		
Total -	-	•	72,997,658	9,335,563	4,455,847	86,789,065
Number of Trains:—						
Passenger -	-	-	1,716,621	229,458		
Goods -	-	•	1,011,481	197,434		
Total -	-	-	2,728,102	462,892	162,485	8,317,479

In an anonymous pamphlet published by "A Civil Engineer," in 1860, some statistics as to the gradual development of railway traffic are given, which are worth republishing, they are deduced from the data of ten years' returns, 1849 to 1859. Twelve railway companies of different classes throughout the country are taken as a fair type of all the railways.

In the Table on the following page, the London, Brighton, and South Coast, and its branches, are estimated to increase, in ten years, 73½ per cent., viz.:— Main lines, 49 per cent.; Branches, 24½ per cent.—73½ per cent. As evidence of the moderation of this estimate, I quote the last report of the directors: "In 1848 the number of passengers conveyed was 2,485,778, and in 1859, to £580,931; in 1848 the receipts for passengers amounted to £349,977, and in 1859 to £40,218; the goods traffic in 1848 amounted to £61,433, and in 1859 to £157,636. The gross revenue in 1848 amounted to £453,408, and in 1859 to £842,293, showing an increase of £388,885 in eleven years, or 86.4 per cent., being at the rate of £35,853, or nearly 8 per cent. per annum.

This return shows that the increase of traffic on these twelve lines amounted in ten years to £5,010,014, or 741 per cent., and that £1,216,410 was received from new lines, and to lines added which had come into play, and were drawing revenue in 1859. Allowing the increased progress of traffic of the companies that existed in 1849 to go on in the same ratio for succeeding years that it has done during the last ten, and the additional lines to increase at only half that rate, we arrive at an increased gross revenue over the whole country of £15,788,598 in ten, or £31,479,196 in twenty years hence.

A less certain but yet very corroborative proof of the accuracy of this estimate may be otherwise deduced. The gross revenue of the railways which in December 1858 was £24,000,000, we find on 31st December, 1859, to be no less than £25,756,100, giving a gross increase of £15,761,000, or in ten years, in the same ratio, an increase of £15,761,000. Now a small proportion only of this increase can be attributed to new lines or branches. The extent opened during 1858 was 426 miles, of which 372 miles were single lines, showing that they were chiefly branches, comparatively unimportant as affecting the general amount of traffic; but taking the traffic at £18 per mile per week, they may be held to have produced £398,736, leaving a clear increase on the main lines of £1,177,364, or in ten years £11,773,640.

† Including a certain amount not distinguished in the separate classes of Passengera.

Exclusive of the Great Northern, South Wales, Glasgow and South Western, Duhlin and Drogheda Railways, and a few others, from which incomplete or no Returns of Mileage have been received.

Edinated revenue in 1669, assuming the tradition the rate on the crase in the same ratio as during the previous ten years, and the tradition on the new lines to increase in half the tradition of the tradition of the tradition that the tradition of the tradition that the tradition of the tradition that the tradition of the tradition of the tradition that the tradition of the tradition that the tradition of the tradition that the tradition of the tradition of the tradition that the tradition of the tradition that the tradition of the tradition that the traditi 624,213 67,950 387,133 2,367,481 546,979 1,222,661 462,565 1,289,000 2,692,609 5,091,310 8,139,063 21,426,546 Per centage of increase on main lines in 1869 over 1849. #<u>£</u>8588424£ 8 . ~ And attri-butable to new lines assumed or added to main lines. 8,840 177,840 40,950 93,600 47,760 156,000 209,820 888,760 1,216,410 TEM YEARS' RAILWAY PROGRESS ON TWELVE LINES. Of which increase there is attributable to main lines. £ 151,757 18,197 90,107 90,107 914,740 94,040 94,836 23,347 94,040 94,836 23,332 518,493 989,080 1,187,081 5,010,014 Gross in traffic of 1859 over 1849. 151,557 13,197 98,947 701,187 155,706 337,640 140,596 392,333 728,313 1,372,840 1,187,081 6,228,424 Bevenue in 1859, in-cluding main lines and other lines added. £ 863,978 49,963 162,045 1,289,817 283,706 835,968 295,765 913,173 3,570,797 2,398,475 1,909,315 12,940,169 Revenue in 1849. £ 213, 215 35, 766 63, 096 63, 096 196, 000 498, 328 155, 169 530, 841 1,169, 460 2,197,957 111,394 6,713,745 East Anglian Rallway
Sootish Central Rallway
Lanceshire and Yorkshire Rallway
Bristol and Exeter Rallway
London, Frighton, & South Coast Rallway
North British Rallway
North British Rallway
North Eastern Rallway (1849 assumed, by
excluding the Miles added in 1858 and 1859) Great Northern and East Lincoln Railway Lancaster and Carlisle Railway NAME OF LINE

At the end of 1858, the number of miles of railway open was 9542. The total number of passengers conveyed during the half-year ending December, 1858, was 76,500,000, thirty millions of whom were passengers by parliamentary trains. The total receipts from all sources of traffic were £12,825,000; the

sums derived from the whole number of passengers amounted to £5,782,000, of which £1,958,000 was derived from twenty-two million second-class, £1,688,000 from nearly ten million first-class, £1,521,000 from the parliamentary, and £519,000 from thirteen million third-class passengers. The receipts from passengers' luggage, parcels, carriages, horses and dogs, amounted to £485,916. £221,088 were received for carrying mails, and £3,988,000 for carrying thirteen million tons of general merchandize. For carrying twenty-four million tons of coal and other minerals, the railways received £2,096,020, and £248,737 for conveying live stock. £10,837,000 out of the whole £12,000,000 were received in England and Wales; £1,358,000 in Scotland, and £629,652 in Ireland. The total number of miles of line open in England and Wales on the 31st December, 1858, was 7001; in Scotland, 1353; and in Ireland, 1188.

The railway traffic of the United Kingdom for the year 1859 shows, as usual, an increase over that of all preceding years. It amounts, as nearly as can be estimated from the returns, to £25,576,100, being an increase over those of 1858, of £1,812,336, and over those of 1857 of £1,413,645. The depression of trade and railway competition at unremunerative rates in 1858 had the effect of annihilating the ordinary increase of traffic, and, for the first time in the history of

railway traffic, depressing the receipts £400,000 below those of the preceding year.

In order to explain what is meant by "the ordinary increase of traffic," it is necessary to state that during the 14 years preceding 1858 the increase in the traffic receipts of railways in the United Kingdom averaged £1,380,000 per annum. In estimating the actual loss of traffic in 1858, as compared with the preceding year, the £1,380,000 must be added to the £400,000 deficiency as compared with 1857, making together £1,780,000 or about 6 per cent. of the whole receipts. This might appear a small matter to persons unacquainted with the mysteries of railway finance, but the effect was to reduce the balances avail-

able for ordinary dividends by 20 per cent.

The continual increase in the capital accounts of railway companies, causes a erpetual increase in the fixed charges against revenue, which must be met before any dividend can be declared on the ordinary capital. The fixed charges of some railway companies are so heavy that a comparatively small depression of trade affects unfavourably the dividend of the ordinary shareholders. Whatever might have been the financial difficulties of railway companies, they cannot be attributed so much to a deficiency of traffic as to the lavish expenditure of

capital, and improvident leases and guarantees.

With the exception of the year 1858, the traffic receipts of railways in the United Kingdom show, from 1842 to 1859, a constant annual increase, which might have tempted many Boards to overload their companies with preference charges, in the anticipation that, at some future period, the increase of traffic on the railways would be more than sufficient to meet all those heavy charges, and pay handsome dividends on the original capital. Had there been previously five or six such years as 1858 to check those sanguine anticipations of continued prosperity, it is probable that railway property generally would now be in a much better position than it is, so far as having lighter preference charges, and more remunerative dividends on the original shares.

The progressive development of railway traffic must be considered as very satisfactory, for, in the year 1842, the traffic receipts on 1630 miles of railway in the United Kingdom amounted to £4,470,700, while in the year 1859 they amounted, on 9568 miles, to £25,576,100, showing an increase in the mileage of 7938 miles, and in the receipts of £21,105,400, being an advance at the

average rate of 467 miles, and of £1,241,500 per annum.

The expenditure of capital on railways advanced rather faster than the traffic. In 1842 the expenditure on the railways above referred to amounted to £54,380,100, and in 1859 to £222,219,100, showing an increase of £267,839,000 in seventeen years, being at the average rate of £15,755,200 per annum. course, the expenditure in some of those years was much more than double the average, and in other years less than one-half the average. In the year 1842 the gross traffic receipts amounted to 8.22 per cent. of the expenditure on capital account, and thence they gradually rose to 9.14 per cent. in the year 1845. The per-centage of gross traffic receipts then declined until, in 1850, owing to the heavy expenditure in that and preceding years, the traffic receipts only amounted to 5.70 per cent. of the outlay. In 1851 the per-centage of traffic to capital increased, and continued to improve up to 1859, when the percentage of gross traffic to the capital expended was 7.94 per cent. Another matter against dividends was the great increase in the working expenses, which, including rates and taxes, rose, in the course of 15 years, from 40 per cent to 48 per cent. of the gross receipts.

From 1842 to 1845 the expenditure on capital account was £21,266,000; from 1845 to 1850 it amounted to £154,876,000; from 1850 to 1855, to £61,381,000; and from 1855 to 1859, about £30,316,000, showing of late years

a considerable decrease in expenditure on capital account.

In the year 1842 the traffic returns on 1630 miles in the United Kingdom amounted to £4,470,700; in 1843, on 1736 miles, to £5,022,650; in 1844, on 1950 miles, to £5,814,980; in 1845, on 2243 miles, to £6,909,270; in 1846. on 2840 miles, to £7,945,870; in 1847, on 3713 miles, to £9,277,671; in 1848, on 4626 miles, to £10,445,100; in 1849, on 5950 miles, to £11,683,800; in 1850, on 6733 miles, to £13,142,235; in 1851, on 6928 miles, to £14,987,310; in 1852, on 7337 miles, to £15,543,610; in 1853, on 7774 miles, to £17,920,530; in 1854, on 8028 miles, to £20,000,520; in 1855, on 8240 miles, to £21,123,300; in 1856, on 8761 miles, to £22,995,500; in 1857, on 9171 miles, to £24,162,460; in 1858, on 9568 miles, to £23,763,764; and in 1859, on 9883 miles, to £25,576,100. Deducting 48 per cent. for working and other expenses, the traffic receipts of 1859 would admit of an average dividend on the total expensions. diture equivalent to 4.13 per cent.

The following statistics are compiled from a recent parliamentary return. The total amount of capital created up to the 31st December, 1858, appears to have been £325,375,507, and the various companies then possessed the power to raise £67,307,248 additional, making an aggregate of £392,682,755. The average rates of interest paid in 1858 were £3 7s 9d on the original shares,

£4 11s 6d on preferential shares, and £4 7s 11d on loans.

CAPITAL and LOANS authorized by ACTS of PARLIAMENT previous to the 31st of December, 1857.

By Shares By Loans In the year 1858:— By Shares By Loans Total Capital and Loans authorized previous to the 31st of December, 1858 Amount of the Share Capital actually paid up on the 31st December, 1858. Not receiving nor entitled to receive any Preferential Dividend or Interest Dividend on ordinary Share Capital Average Rate of Interest per cent. per annum, 3388 Receiving or entitled to receive Preferential Dividend or Interest Dividend on Interest per cent. per annum, 4574 Dividend on Interest thereon Average Rate of Interest per cent. per annum, 4574 Dividend or Interest thereon Average Rate of Interest per cent. per annum, 4574 Amount of Interest payable thereon Average Rate of Interest per cent. per annum, 4386 Si.683,179 Amount of Interest payable thereon Average Rate of Interest per cent. per annum, 4396 Total Amount which, at the end of 1858, the Companies retained the power to raise either by existing or by new Shares, or Loans Total Amount of Capital raised or authorized to be raised Amount axpended in the Construction of Railway Works Preliminary Expenses, &c. Total Total Loans, ditto Total Capital 31st of December, 1858 Total Loans, ditto Total Capital and Loan to 31st December, 1858 - 282,488,776 - 282,681,755			em e	S OTER O	1 Dec	CHINGI	, 100/	•	
In the year 1858:— By Shares By Loans Total Capital and Loans authorized previous to the 31st of December, 1858 AMOUNT of the SHARE CAPITAL actually paid up on the 31st December, 1858. Not receiving nor entitled to receive any Preferential Dividend or Interest Dividend on ordinary Share Capital Average Rate of Interest per cent. per annum, 3-388 Average Rate of Interest per cent. per annum, 4-574 Total Loan Debt of the Companies on the 31st of December, 1858 Awount of Interest per cent. per annum, 4-574 Total Amount of Interest per cent. per annum, 4-396 Areage Rate of Interest per cent. per annum, 4-396 Amount of Interest per cent. per annum, 4-396 Total Amount which, at the end of 1858, the Companies had raised by Shares and Loans Total Amount which, at the end of 1858, the Companies retained the power to raise either by existing or by new Shares, or Loans Total Amount of Capital raised or authorized to be raised Amount expended in the Construction of Railway Works, Preliminary Expenses, &c. Total Capital, 31st of December, 1858 Total Capital, 31st of December, 1858 Total Loans, ditto	By Shares By Loans	-	-	•		•	. •		0
Total Capital and Loans authorized previous to the 31st of December, 1858 - 2392,682,755 Amount of the Share Capital actually paid up on the 31st December, 1858. Not receiving nor entitled to receive any Preferential Dividend or Interest Dividend or Interest Dividend or Office of the Capital Average Rate of Interest per cent. per annum, 3888 - 283 7s 6d Receiving or entitled to receive Preferential Dividend or Interest - 61,854,647 2,839,231 Average Rate of Interest per cent. per annum, 4574 - 2,839,231 Average Rate of Interest per cent. per annum, 4574 - 2,839,231 Average Rate of Interest per cent. per annum, 4574 - 2,839,231 Average Rate of Interest per cent. per annum, 4574 - 3,591,148 6d 31,683,179 Amount of Interest payable thereon - 3,591,148 24 7s 11d Total Amount which, at the end of 1858, the Companies had raised by Shares and Loans - 70 and 1858, the Companies retained the power to raise either by existing or by new Shares, or Loans - 67,307,248 Amount expended in the Construction of Railway Works, Preliminary Expenses, &c 262,615,442 25,184,766 - 292,248,276 267,800,308 267,800,308 70 and Loans, ditto	By Shares	year 1858	:	-		2		5,253,79	
December, 1858 - £392,692,765 AMOUNT of the SHARE CAPITAL actually paid up on the 31st December, 1858. Not receiving nor entitled to receive any Preferential Dividend or Interest Dividend on ordinary Share Capital Average Rate of Interest per cent. per annum, 3:388 - £3 7s 6d Receiving or entitled to receive Preferential Dividend or Interest Dividend or Interest thereon Average Rate of Interest per cent. per annum, 4:574 Total Loan Debt of the Companies on the 31st of December, 1858 - 8,892,331 Average Rate of Interest per cent. per annum, 4:396 - 2,829,231 Amount of Interest per cent. per annum, 4:396 - 3,591,148 £4 7s 11d Total Amount which, at the end of 1858, the Companies had raised by Shares and Loans Total Amount which, at the end of 1858, the Companies retained the power to raise either by existing or by new Shares, or Loans Total Amount of Capital raised or authorized to be raised Amount expended in the Construction of Railway Works, Preliminary Expenses, &c. Ditto, in Rolling Stock Total Capital, 31st of December, 1858 Total Loans, ditto	•	-	•	•	•	•	•		
Amount of the Share Capital actually paid up on the 31st December, 1858. Not receiving nor entitled to receive any Preferential Dividend or Interest Dividend on ordinary Share Capital Average Rate of Interest per cent. per annum, 3388 Receiving or entitled to receive Preferential Dividend or Interest Dividend or Interest thereon Average Rate of Interest per cent. per annum, 4574 Amount of Interest payable thereon Average Rate of Interest per cent. per annum, 4296 Total Loan Debt of the Companies on the 31st of December, 1858 Amount of Interest per cent. per annum, 4296 Total Amount which, at the end of 1858, the Companies had raised by Shares and Loans Total Amount which, at the end of 1858, the Companies retained the power to raise either by existing or by new Shares, or Loans Total Amount of Capital raised or authorized to be raised Amount expended in the Construction of Railway Works, Preliminary Expenses, &c. Total Capital, 31st of December, 1858 Total Capital, 31st of December, 1858 Total Loans, ditto	To	tal Capita Decemi	al and Lo er, 1858	ans auth -	orized -	previou	s to the	B 31st of	£392,682,755
Interest Dividend on ordinary Share Capital Average Rate of Interest per cent. per annum, 3388 Receiving or entitled to receive Preferential Dividend or Interest Dividend or Interest thereon Dividend or Interest thereon Average Rate of Interest per cent. per annum, 4:574 Total Loan Debt of the Companies on the 31st of December, 1858 Awount of Interest payable thereon Average Rate of Interest per cent. per annum, 4:396 Total Amount which, at the end of 1858, the Companies had raised by Shares and Loans Total Amount which, at the end of 1858, the Companies retained the power to raise either by existing or by new Shares, or Loans Total Amount of Capital raised or authorized to be raised Amount expended in the Construction of Railway Works, Freilminary Expenses, &c. Total Total Capital, 31st of December, 1858 Total Loans, ditto	AMOUNT of	he SHA	RE CAI	PITAL 8	ctuall	y paid	up on	the 31st I	ecember, 1858.
Dividend on ordinary Share Capital Average Rate of Interest per cent. per annum, 3388 Average Rate of Interest per cent. per annum, 4574 Total Loan Debt of the Companies on the 31st of December, 1858 Average Rate of Interest per cent. per annum, 4574 Amount of Interest payable thereon Average Rate of Interest per cent. per annum, 4584 Total Amount which, at the end of 1858, the Companies had raised by Shares and Loans Total Amount which, at the end of 1858, the Companies retained the power to raise either by existing or by new Shares, or Loans Total Amount of Capital raised or authorized to be raised Amount expended in the Construction of Railway Works, Preliminary Expenses, &c. Ditto, in Rolling Stock Total Capital, 31st of December, 1858 Total Loans, ditto	Not receiving Interes	ng nor er t	ititled to	receive	any P	referen	tial Di	vidend or	£181.837.781
Receiving or entitled to receive Preferential Dividend or Interest Dividend or Interest thereon Average Rate of Interest per cent. per annum, 4:574 Total Loan Debt of the Companies on the 31st of December, 1858 - 81,683,179 Amount of Interest payable thereon - 3,591,148 Average Rate of Interest per cent. per annum, 4:396 - 3,591,148 Average Rate of Interest per cent. per annum, 4:396 - 3,591,148 Average Rate of Interest per cent. per annum, 4:396 - 3,591,148 E4 7s 11d Total Amount which, at the end of 1858, the Companies retained the power to raise either by existing or by new Shares, or Loans - 67,307,248 Total Amount of Capital raised or authorized to be raised Amount expended in the Construction of Railway Works, Preliminary Expenses, &c. Total Capital, 31st of December, 1858 - 100,434,479	Dividend of	ordinar	y Share (Capital	ennur	- n 9-9ee	•	• _	- 6,161,099
Average Rate of Interest per cent, per annum, 4·574 Total Loan Debt of the Companies on the 31st of December, 1858 Amount of Interest payable thereon Average Rate of Interest per cent, per annum, 4·396 Total Amount which, at the end of 1858, the Companies had raised by Shares and Loans Total Amount which, at the end of 1858, the Companies retained the power to raise either by existing or by new Shares, or Loans Total Amount of Capital raised or authorized to be raised Amount expended in the Construction of Railway Works, Preliminary Expenses, &c. Total Capital, 31st of December, 1858 Total Capital, 31st of December, 1858 Total Loans, ditto	Receiving o	r entitled	l to recei	ve Prefe	rential	Divider	nd or Ir	iterest	- 61,854,547
Amount of Interest payable thereon Average Rate of Interest per cent. per annum, 4:396 Total Amount which, at the end of 1858, the Companies had raised by Shares and Loans Total Amount which, at the end of 1858, the Companies retained the power to raise either by existing or by new Shares, or Loans Total Amount of Capital raised or authorized to be raised Amount expended in the Construction of Railway Works, Preliminary Expenses, &c. Total Total Capital, 31st of December, 1858 Total Capital, 31st of December, 1858 Total Loans, ditto	Average Ra	te of Inte	erest per	cent. per	annu	m, 4·574			£4 11s 6d
Average Rate of Interest per cent. per annum, 4:396 Total Amount which, at the end of 1858, the Companies had raised by Shares and Loans Total Amount which, at the end of 1858, the Companies retained the power to raise either by existing or by new Shares, or Loans Total Amount of Capital raised or authorized to be raised Amount expended in the Construction of Railway Works, Preliminary Expenses, &c. Ditto, in Rolling Stock Total Total Capital, 31st of December, 1858 Total Loans, ditto	Amount of	interest r	ayable ti	rereon	-		-	, 1858 -	
Total Amount which, at the end of 1858, the Companies retained the power to raise either by existing or by new Shares, or Loans - 57,307,248 Total Amount of Capital raised or authorized to be raised - 392,682,755 Amount expended in the Construction of Railway Works, Preliminary Expenses, &c 262,615,442 Ditto, in Rolling Stock - Total - 292,248,276 Total Capital, 31st of December, 1858 - 292,248,276 Total Loans, ditto - 100,434,479	Total Amou	nt which	, at the e	cent. per nd of 185	annur	n , 4·3 96 Compan	ies had	raised by	£4 7s 11d
power to raise either by existing or by new Shares, or Loans - 87,307,348 Total Amount of Capital raised or authorized to be raised - 892,682,755 Amount expended in the Construction of Railway Works, Preliminary Expenses, &c. Ditto, in Rolling Stock - 25,184,766 Total Capital, 31st of December, 1858 - Total - 292,248,276 Total Loans, ditto - 100,434,479				nd of 188	a. the	Compa	_ nies ref	tained the	825,875,507
Amount expended in the Construction of Railway Works, Preliminary Expenses, &c. Ditto, in Rolling Stock Total Capital, 31st of December, 1888 Total Loans, ditto Total Loans, ditto 26, 615, 442 25, 184, 766 292, 248, 276 100, 424, 479	power t	o raise ei	ther by e	xisting (or by n	ew Sha	res, or	Loans -	
Ditto, in Rolling Stock	Amount exp	ended in	the Cons	struction				£ 262 615 449	• •
Total Capital, 31st of December, 1888 - 292,248,276 Total Loans, ditto - 100,434,479				•	•	Total '	•		3
	Total Capita	l, Sist of	Decembe	er, 1858	-	AUM			3
	Total Capita	and Lo	un to 31st	Decem	ber, 18	58	• •	100,484,47	

Of the 9116 miles open for traffic on the 31st December, 1857, 7053 miles was constructed on the narrow guage, namely, 5776 miles in England, 1269 in Scotland, and 8 in Ireland: 740 miles in England on the broad guage, and 261 miles on the mixed guage, while 1026 miles were on the Irish guage.

on the mixed guage, while 1026 miles were on the Irish guage.

In June, 1859, the length of lines open throughout this kingdom was 9796 miles, of which 7217 were in England and Wales, 1869 in Scotland, and 1210 in Ireland. The number of persons employed on railways open was 116,270,

and on those in course of construction, 39,975.

RAILWAYS IN INDIA. Railway extension, which is so essentially requisite in India, has been comparatively slow; for although some of the principal companies were incorporated ten years ago, and nearly five thousand miles of railway are sanctioned by the Government, only 800 miles are as yet completed and open for traffic. They are pushing on, however, the construction now with more energy, and upwards of 2000 miles are expected to be opened in 1861. The cost of construction of some of the Indian lines is much lower than the average cost in Europe, and will compare favourably even with the chief American lines, as the following table will show:—

Name of State.	Year.	Length of Line open.	Total Capital ex- pended per Mile of Line open.	Receipts from Traffic per Mile of Line open.	Net Receipts per Mile of Line open.	Proportion per cent. of Working Ex- penses to Receipts.	Proportion per cent. which Net Receipts bear to the Capital expended.
Austria Belgium France Germany, exclusive of Austria & Prussia Great Britain— England and Wales Scotland Ireland Holland Prussia Sardinia Spain Switzerland Tuscany United States of America	1856 1854 1884 1885 1857 1857 1858 1855 1856 1856 1856	Miles. 1,586 445 2,913 2,226 6,706 1,243 1,070 163 2,503 203 130 203 17,481	£ 16,378 16,391 25,668 12,111 39,275 29,225 15,664 19,931 14,101 19,888 15,556 8,275	£ 9,190 2,158 2,706 1,816 2,107 1,709 1,877 1,477 924 636 966 1,234	£ 1,040 898 1,515 919 1,597 1,166 667 909 703 409 5520 568	52.70 58:16 44:01 49:28 48:00 44:00 58:00 60:96 51:59 51:38 56:48 56:28 46:18	9-32 5-48 6-58 5-78 4-06 4-13 3-99 2-35 6-22 1-48 3.34 6-70
East Indian Great Indian Peninsula Madras	1858-59 1858-59 1858-59	149 149 96	12,084 8,758 7,000	1,447 764 499	770 427 234	45-04 44-1 52-9	7. 4 5. 14 2. 1

In many of the British Colonies there are now railways in operation, and the extent of mileage is yearly increasing. In Victoria, New South Wales and South Australia, and in Canterbury, New Zealand, there are lines of railways. In the Cape Colony railways are constructing. In British Guians, Jamaica and Trinidad, railways have been some time completed. In the North American Colonies there are railroads in New Brunswick and Canada; those in the latter colony having been specifically mentioned in the new article under that head in this Supplement.

RAILWAYS IN GERMANY. At the end of 1859 the total length of German railways in actual working was 1767 German miles (each equal to about 4½ English miles). Of these railways, of which 1109 miles belong to private companies, and 658 to the State, Prussia has 665 miles of private railways. Austria, counting only those parts of her dominions included in the German

manic Confederation, has 336 miles. There are now only seven States in Germany which have no railways, namely, Mecklenburg-Strelitz, Lippe, Waldeck, the two principalities of Schwarzburg, and the two principalities of Lichtenstein.

The capital of the German Railway Companies raised in shares amounted, at the close of 1858, (Austrian railways excluded) to £63,262,100, of which there had been raised by way of loans and debentures £22,800,000. The sum expended upon the State lines had been about £45,000,000 sterling.

In 1857 the number of persons conveyed on all the German railways was 45,191,705, and the quantity of goods 400 million centners (1131 lb. avoir-

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dupois.)

The total receipts in the same year were £12,875,913, of which £4,304,988 were for passengers, £7,851,957 for goods, and the rest extraordinary revenue.

The receipts of the different railways varied from 2 per cent. to 23 per cent. upon the capital expended; the average dividend realized in 1857 was 7 per cent.

The following tables will serve for comparison:—

o	ountr	y .		Popula- tion per Statute Square Mile.	Average Cost of Railways per Mile.	Average Working Ex- penses per Mile.	Average Earnings per Mile.
England France Belgium Prussia Austria Germany	:	:	1857 1854 1856 1857 1857 1857	304 168 337 138 148	£ 39,275 25,668 16,391 14,486 18,465 16,980	£ 1,564 1,191 1,259 1,248 1,239 931	£ 8,161 2,706 2,158 1,983 2,686 1,919*

^{*} The average cost of coke per mile travelled is, in Germany, 4s 8d: in England it is 2s 9d.

Country		Avera	ge Fare Mile.	es per	Average Payment per Cent. to original	Proportion of Accidents and Injuries to	Number of times less dangerous
		1st Class	2nd Class	3rd Class.	Share-holders.		than England.
France Belgium Prussia	1857 1854 1856 1857 1857	d. 9:01 1:55 1:33 1:4 1:4	d. 1·41 1·16 1·0 1·15 1·1	87 84 65 77 88	8-88 4-26 5-58 5-48 7-44 6-75 5-52	l in 183,903 l in 1,375,092 l in 1,611,237 l in 3,294,075	7 times 9 ,, 16 ,,

[†] Proportion per cent. of net receipts, less interest, on Preference Shares and on Loans, to the ordinary Share Capital. All the other proportions are per centages of net receipts to the total capital expended, governmental and private.

RAILROADS IN THE UNITED STATES. The American Railroad Journal gave the length of the railroads in operation in the United States, January 1, 1859, at 27,857 miles, cost 961,047,364 dollars (£192,209,473.) The Secretary of the Treasury's Report on the Finances (December 8, 1857, pp. 44, 45) stated the capital paid up of the railroads in the United States at 491,435,661 dollars; the aggregate debt 417,243,664 dollars; annual interest on the debt 25,093,203 dollars; the net revenue 48,406,488 dollars; the available income 24,290,826 dollars. The following table shows the growth of the American railroad system:—

Miles built 1st five years—1828-32 2nd ——1833-87 #—1828-32 131 —1833-37 1,281 —1838-42 2,465 Miles built 4th five years-1843-47 1,459 5th 6th -1858-57 12,845

Miles built 1858-59 8881.

RAISINS. The imports of this dried fruit have been largely increased of late, averaging in the last ten years 320,000 cwts. per annum. In 1858, the receipts were 357,485 cwts., and in 1859, 429,058 cwts. In 1860, Mr. Gladstone reduced the duty on raisins from 10s to 7s the cwt.

RAPE SEED. This like all the other oil-seeds has become of increased demand with the progress of manufactures and trade. In 1845, the imports were

but 47,677 quarters; in 1850 they had risen to 107,029 quarters; in 1855, to 162,353 quarters, and in 1859 to 412,174 quarters.

REVENUE AND EXPENDITURE, PUBLIC. In 1841, the duty on rice in the husk £21,892, and some other small taxes amounting to £5338, were repealed. In 1842, coffee duties were reduced £201,113; timber and wood £608,414; export duties £109,778; other custom duties £579,639; stage coaches £77,779, and other taxes amounting to £19,643. But in this year, the income and property tax £5,100,000 was imposed; export duty on coals £141.930; spirit duty and stamp duty for Ireland, together £361.745. and other taxes £26,314, making £5,629,989 new taxes, against £1,596,366 old taxes repealed or reduced. In 1843 the spirit duty was again reduced in Ireland £240,000; the duty on timber and wood £126,453 reduced, and other taxes, making a total reduction of £411,821. In 1844 a rather larger amount of taxes was reduced, consisting of £86,174 on copper; £95,816 on currants; £97,140 on wool; £101,959 on marine insurances; £45,000 on glass, and some other taxes, amounting in all to £458,810. In 1845, £4,546,306 of taxes were reduced, consisting of £2,309,857 on sugar; £129,183 on molesces; £682,042 on raw cotton; £115,438 the export duty on coals, which had been imposed in 1842; £380,786 other customs duties; suction duties £305,000; and glass £624,000. A duty on auctioneers' and appraisers' licenses, bringing in about £53,720, was imposed. In 1846 a further reduction of customs duties amounting to £1,151,790 was made, viz., butter and cheese £205,437: tallow £101,966; clover seed £36,077; spirits £482,286; silk manufactures £162,985; woollen manufactures £27,970; and other customs duties £135,069. In 1847, the reductions amounted to £344,886, consisting of £243,085 woods from foreign countries; £53,152 sugar and molasses; rum £46,974, and other taxes £1675. In 1848 there was a further reduction of £585,968 taxes, under the following heads, copper ore £35,745; colonial rum £69,353; sugar and molasses £258,854; foreign wood £215,028, and other taxes £6988. The reduction in 1849 was £388,798; the greater proportion of which, £355,257, was in sugar and molasses, £29,327 on sperm oil, and £4214 on other petty taxes. In 1850, the reduction of taxes alone reached £1,310,151, being a further abatement on sugar and molasses of £331,073; stamps £520,000; bricks £456,000, and other small taxes £3078. In 1851, the window duty £1,878,800 was removed; coffee £149,161; sugar and molasses £259,804; foreign timber £292,099. in all, £2,679,864. In place of the window duty an inhabited house duty was imposed, calculated to bring in £600,000. In 1852, the only alteration was a further reduction of duty on sugar and molasses of £95,928. In 1853 a large amount of taxation was dealt with, but the new taxes about balanced those removed. The repeals and reductions consisted of about £1,500,000 on customs articles, and £1,750,000 on excise and stamps, &c.; the items being tea £968,877; butter and cheese £106,535; sugar and molasses £78,793; raisins £65,659, other customs articles £279,610. Excise on soap, &c. £1,171,000; stamps £277,000; assessed taxes £300,000. The new taxes imposed in lien of those abolished were £590,000 excise duty on spirits; £16,383 customs duties; succession tax estimated to produce £2,000,000 a year, and property tax £750,000. In 1854, owing to the declaration of war with Russia, although £1,284,107 taxes were abolished, fresh taxes amounting to £9,954,643 were imposed. The taxes removed were, tea £980,568; chip plat and other articles £2539; stamps on bills of exchange reduced, £11,000; assessed taxes repealed, £290,000. The new taxes imposed were, on foreign spirits £16,694; malt duty £2,450,000; extra excise duty on spirits £450,000; income and

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property tax £6,614,000. In 1855, the taxes repealed were trivial; £2960 on window glass and other articles, and £250,000 loss from the abolition of the comwindow glass and other articles, and £250,000 loss from the aboution of the compulsory impressed newspaper stamp; £5,225,907 of new taxes were imposed, consisting of £1,267,566 on sugar and molasses; £774,413 on the a; £155,629 on coffee; £25,546 on colonial spirits, and £2,753 on other customs articles; £1,000,000 on British spirits, and £2,000,000 increased income tax.

In 1856, with the return of peace the reduction of taxation again proceeded, the malt were tax which had brought in £9,200,000 was removed, and customs

the malt war tax which had brought in £2,200,000 was removed, and customs duties on various small articles to the extent of £3475 abolished. In 1857, a further large reduction of £10,753,582 was made, consisting of £9,125,000 on property and income tax; £1,054,637 on tea; £418,988 on sugar and molasses; £145,816 on coffee; and about £9000 on various other small customs articles. In 1858, a further reduction of £2,100,000 on the property and income tax was made. A few new taxes were, however, imposed, amounting to £456,780, consisting of £9080 customs duty on colonial spirits consumed in Ireland; £280,000 excise duty on spirits, and £167,700 various stamp duties levied. In 1859 the income-tax was increased.

The forthe forthe forthe from the from	he following tab the surplus or do to which is adde the Exports of from page 578.	The following table ahows the Revenue and Expenditure (after payments for collection) with the surplus or deficiency, and the Taxes imposed and repealed in each of the years to 1839; to which is added, for comparison, the Average price of Wheat, and the declared value of the Exports of the Produce and Manufactures of the United Kingdom, in continuation from page 578.	Revenue id the Tax sarison, th e and Mi	and Exper tes imposed e Average anufactures	diture (at and reper price of \ of the U	fter paymen aled in each Wheat, and nited King	ts for col of the y the decli dom, in	lection) with ears to 1859 ared value o continuation	100a fue likcoli
Теата.	Net Revenue.	Expenditure out of Revenue.	Surplus of Revenue.	Deficiency of Revenue.	Taxes Imposed.	Taxes Repealed or Reduced.	Wheat per Quarter.	Value of Exports.	16-tax w
1843 1843 1844 1844 1846 1846 1855 1855 1855 1855 1855 1855 1855 185	46,963,830 02,832,830 02,003,753 03,003,753 03,003,753 03,338,717 02,338,717 02,338,717 02,338,006 02,331,071 02,331,071 03,032,506 03,344,603	50, 26, 58, 58, 58, 58, 58, 58, 58, 58, 58, 58	2, 1,448,304,3,366,105,3,464,304,3,464,304,3,464,304,3,46,4,3,46,4,4,47,6,59,4,417,6,59,4,417,6,59,4,417,6,59,4,417,6,59,4,417,6,59,4,4,000,4,4,4,000,4,4,4,000,4,4,4,000,4,4,4,4,000,4	2,986,684 7,986,684 7,986,684 7,986,684 10,104,411 8,101,104,412 10,104,412	6,629,989	27,170 41,1370 41,1370 4,646,306 1,151,700 844,886 88,738 1,130,131 2,573,864 8,347,107 8,136,4107 1,136,4107 1,136,000	- 72 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	47.84,988 19.304,988 19.304,988 19.304,706 19.706,107 19.307,888 19.307,888 17.448,728 1	as increased.
	* Thre	Three onarters to Sent	lamt	+ Petimeto		+ Ten month	1		

The deficiencies in the revenue in the enumerated years were provided for by loans and Exchequer Bills. Between the years 1841 and 1859, an addition was made to the national funded debt of £14,270,397. The Crimean war, the expenses of the China wars, and the large fleet and extended fortifications the country has had to keep up, owing to the unsettled state of affairs on the Continent, have led to a greatly increased national expenditure.

Taking the whole period under review, 1841-1859, there has been a net reduc-

Taking the whole period under review, 1841-1859, there has been a net reduction of taxation of £6,628,942. Notwithstanding this remission, the net revenue paid into the Exchequer has advanced from £46,965,630 in 1841, to £70,578,000 in 1859, so that the revenue-yielding powers of the kingdom would seem to have increased in the 18 years about 66 per cent.

We next give a quinquennial review of the various sources of revenue:-

				1845.	1850.	1855.	1800.
				£		£	£
Customs ·		-	-	20,196,856	20,442,170	20,615,338	22,700,000
Excise		-	-	13,585,585	14,316,084	16,389,486	19,170,000
Stamps		-	-	7,710,683	6,558,332	6,805,605	8,000,000
Taxes -		-	- '	4,223,842	4,360,179	2,945,780	3,250,000
Income-tax		-	-	5,026,570	5,383,037	13,718,185	2,400,000
Post-office	•	-	-	753,000	820,000	1,137,220	8,400,000
Crown Land		-	-	120,000	160,000	280,516	280,000
Miscellaneou		-	-	1,443,820	770,878	1,100,057	1,500,000

It should be stated that the figures given in the last column are taken from Mr. Gladstone's estimate, based on the system at present in existence; but the changes proposed by the right hon gentleman will vary the various totals, increasing the income-tax, for example, to £8,472,000. The figures are nevertheless interesting, as they show that the resources of the country have steadily increased, a great amount of taxation having been remitted. As regards the expenditure a quinquennial review stands thus:—

		1845.	1850.	1855.	1860.
Interest on debt Army Navy Civil charges	: :	£ 28,353,872 8,854,296 6,809,873 5,324,672	28,091,590 8,955,061 6,437,883 6,747,340	£ 27,647,899 29,377,249 19,014,708 8,465,832	£ 26,900,000 15,800,000 13,900,000 9,500,000

It should be observed that the expense of the revenue departments are not included in the comparison.

RHUBARB. In 1858 the imports of this medicinal root were 292,840 pounds, valued at £41,771. Of the Russian rhubarb, valued at 12s per pound, 15,114 pounds came in from Russia direct or through Hamburg. Of the cheaper Chinese rhubarb, not worth more than 2s 3d per pound, 273,830 pounds were received. It has been free of duty since March 1845. The exports in the year 1858 were 332,938 pounds.

1858 were 332,938 pounds.

RIBAND, RIBBON. The quantity of ribbons of various kinds imported in the year 1858 amounted to 383,619 pounds weight, valued at £986,533, nearly all of which were sold and used in this country. The duty received thereon was £143,805. They were subject to various rates of duty: plain silk ribbon of one colour to a duty of 6s per pound; plain satin to 8s per pound; gauze or crape ribbon 14s per pound; if mixed with silk or satin, 12s per pound; duties paid 19 March, 1846, plain velvet or plush ribbon, 5s per pound; ditto, figured or brocaded, or with satin or fancy edge, 10s per pound; duty fixed 8 Aug. 1854. In 1860, by the terms of the French treaty, alterations were made in the rates of duty. Belgium and France are the countries from whence we receive the bulk of the ribbons imported.

RICE. This grain is par excellence the bread-corn of most parts of Asia;

the production is most extensive, and the commerce in it immense. formed statists agree that a common Indian labourer requires 56 lbs. of rice If we take but 75,000,000 souls, or less than one-half the population of British India, as rice consumers, this would entail at the foregoing ratio a consumption of 223 million tons per annum, besides the large quantity shipped to Ceylon, Mauritius, Bourbon, Great Britain, and other countries, and that saved for seed. For the undetermined population of the various Eastern nations, including China and the numerous islands of the Eastern Archipelago, all be it observed dependent on rice as the main staple of food, it would be impossible to form any reliable estimate. At even 3 cwt. each per annum, the Chinese population would consume 54,000,000 tons of rice. At least half an acre is supposed to be devoted to the culture of rice in China for every head of its 400,000,000 population, and two crops of rice, besides other grain, are frequently raised there in the year. The culture of rice in Java is largely attended to by the Dutch, and considerable quantities are exported.

The Province of Arracan, in the Bay of Bengal, has become the granary for most of the British Eastern possessions, Singapore, Hong Kong, Ceylon, Mauritius, &c. Akyab and the Bassein district yielded in 1855 upwards of 830,000 tons of rice, and the shipments from Akyab rose from 70,000 tons in 1850, to 210,571 tons in 1855. Ceylon alone receives about 4,000,000 bushels

of paddy and rice yearly, nearly all from British India.

While the production of rice in India is so largely on the increase, but little progress is made in its culture in the United States, although more pains is certainly taken there in the cultivation and in the preparation of the grain for market. Rice is now largely used by our manufacturers for making starch, by some agriculturists for feeding stock, and by the bulk of our population as an esteemed article of food; indeed it has always been much more popular than maize.

The progressive increase in the imports of rice and paddy into the United

Dadd-

Kingdom is shown by the following figures:-

			Trice.	a suuy,
1845	-	-	542,160 cwts.	45,287 grs.
1850	-	_	785,451	87,150
1855	. - -		9,238,158	18,673
1859	•		8,692,023	25,877

The importation of unhusked rice has altered very little, keeping at an average of about 25,000 quarters, but that of cleaned rice has averaged more than 3,000,000 quarters in the last eight years. In 1859 the import however fell to 1,450,000 cwts. The duty on rice and rice meal is 41d per cwt. and on rough or unhusked rice 9d per quarter. In 1858, 14,298 cwts. of rice meal, and 11,960 cwts. of rice dust for feeding cattle were imported.

RICE PAPER is now ascertained to be made by the Chinese from the pith

of the Aralia papyrifera.

ROMAN STATES. The area of these States is now only 16,155 square miles. The population in 1853 was 3,124,668. The revenue in 1857, £3,039,321, and the expenditure £3,135,436. The number of vessels that entered at Ancona in 1857 was 684, of 110,704 tons, of which 53 ships and 28,229 tons were British. The imports in 1855 amounted to £2,553,734, and the exports to £1,676,386.

In 1860 the war in Italy, carried on by Garibaldi, interfered greatly with the trade and commercial progress of these States.

The value of the trade at Ancona in 1858 was

			II	проп			Exporta.				
Foreign		_	Tons. 113,081	Ī	Value. £842,373	1	Tons. 111.629	ī	Value £354,624		
British	-			- 1		- 1		1			
Driusu	-	-	25,666	ı	879,292	١.	25,032	- 1	39,269		

ROSIN. In 1858 the imports of foreign made rosin were 701,430 cwts., worth about 9s per bushel, aggregate value, £314,715. The bulk, 682,452 cwts., came from the United States. The exports in the same year were 34,193 cwts., of which 28,314 cwts. were British made rosin. The import duty was removed in 1845.

RUM 254 RUS

RUM. The import and consumption of this spirit have largely increased of late years, owing to the extension of the royal and mercantile navies. The comparative imports have been as follows:—

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1845 - 4,808,798 proof gallons. 1845 - 8,714,237 proof gallons. 1850 - 4,194,683 ... 1859 - 6,878,587
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Since 1854, the average imports have been 7,500,000 gallons per annum, about half of which quantity is taken for home consumption: of the imports in 1858, 7,311,219 gallons; 6,609,603 gallons were from Demerars and the West India islands; 153,251 gallons from the foreign West Indies, and the remainder from the Mauritius and British India. The duties have varied of late years. The duty on colonial rum imported into England was fixed at 8s 2d per gallon on 19th July, 1848, and on 21st April, 1855, the duty was assimilated when imported into Scotland. At the same time, a duty of 6s 4d per gallon was fixed for Ireland, which was increased on 19th April, 1858, to 8s 2d the same as the other parts of the kingdom. Foreign rum which had been subject to a duty of 15s per gallon, since 18th March, 1846, was in March 1860 reduced to 8s 3d. RUSSIA. The population of the empire of Russia, including the military,

RUSSIA. The population of the empire of Russia, including the military, with the exception of the people of the Caucasus (about 1,400,000 souls), and the independent tribes in the American Company's possessions (40 or 50,000 souls), was stated in 1856 at 71,500,000. The population of European Russia is about 64,000,000 and Asiatic Russia 7,300,000.

The chief imports into the United Kingdom from Russia in 1858, were 6,647,420 lbs. wool; 1,004,563 cwts. tallow; 1,758,234 lbs. bristles; 930,884 cwts. of flax and tow, &c.; 1552 cwts. of borse hair; 611,283 cwts. hemp; 555,593 cwts. of oil-seeds; 9071 lasts of tar; 3063 cwts. of feathers, and 7,500,000 quills; 2,282,163 quarters of grain of all kinds; 291,324 loads of wood and timber; 13,301 tons of bones, and 12,488 cwts. of pot ashes.

The receipts from the Customs establishments of the Russian empire for the

The receipts from the Customs establishments of the Russian empire for the ten years ending 1852 were almost stationary at an average of £5,000,000. They were derived from the following sources in 1857.

In 1856 the receipts from the Crown domains were £7,947,255.

The quantity of gold obtained in the mines of Russia from 1752 to 1852 was 1,068,266 lbs. Troy, and the quantities produced in recent years have been—

1847 1848	•	•	•	Quantity. lbs. Troy. 72,911 77,608	Value at the rate of 113 grs. Troy per £ sterling. 3,715,015 8,955,127
	-	_	_		
1849	-	-	-	71,711	8,653,715
1850	-	-	•	66,561	8,391,283
1851	-	-	_	67,682	8,458,588
1852	-	-	-	67,952	8,462,154

The following shows the value of the imports and exports of coin and bullion for the Russian empire for 1848 to 1852.

•				Importa.	Exports.
1848	_	-	_	959,202	2.032.719
1849	-	-	-	862,187	968,577
1850	-	-	-	1,231,199	830,542
1851	-	-	-	1,014,464	2,597,015
1852	-	-	-	1,988,801	5,056,871
1857	-	-	-	•••	3,612,971

į

VALUE of the IMPORTS and EXPORTS of MERCHANDISE for EUROPEAN RUSSI for six years.

			Imports.	Exporta.
1849	19		- 12,721,242	18,201,995
1850	_	-	- 12,050,347	18,162,879
1851	-	-	- 18,783,504	18,311,656
1852	-	-	- 13,160,409	15,841,371
1855	-	_	- 11,711,981	6,322,790
1857	_	-	- 22,382,501	18,674,119

The last-named year includes specie and bullion which the previous five years do not.

The extraordinary fluctuations that have taken place in the foreign commerce of Russia in the last few years, may be attributed to the changes in the Russian tariff of 1850; to the apprehension of war in 1853, and its actual outbreak in 1854; to the sudden influx of renewed trade that occurred immediately after the signature of the Treaty of Peace in the early spring of 1856; and, finally, to the alterations that were again made in the Customs Tariff of the country in the middle of 1857.

A general spirit of enterprise has arisen among the influential and active commercial classes in Russia, that promises to lead to important results. Companies have been set on foot at Moscow for working the mineral resources of the country. Powerful associations have been formed in the Government of Tver; and elsewhere, for giving increased facilities to the trade of Northern Russia, and for augmenting steam navigation on the principal rivers of the empire; while satisfactory progress continues to be made in the great network of railways in course of construction, and the entire line from St. Petersburg to Warsaw is expected to be completed early in 1861. These important enterprises will tend rapidly to develop some of the inexhaustible resources of this great empire.

The value of the Imports, Exports, and Customs dues at the port of St Petersburg have been :—

Year.	Imports.	Exports.	Customs.
	£		£
1852	10,391,565	6,259,074	2,394,788
1853	11,316,697	8,484,006	2,012,978
1854	8,959,377	1,517,734	1,063,610
1855	2,521,493	456,980	540,670
1856	10,904,694	8,696,631	1,562,954
1857	14,910,463	9,754,052	2,099,420
1858	15,088,814	10,828,168	2,067,825

The following Specie was comprised in the above returns:-

Year.	Imports.	Exports.
	Silver Roubles.	Silver Roubles
1852	2,860,020	2.943.338
1853	7,974,935	2,798,319
1854	501,428	6,594,135
1855	412,774	1,629,826
1856	9,343,672	238,116
1857	3,125,963	10,742,593
1858	-	22,816,875
Roubles 3s 2d	24,218,787	47,763,902
£	8,834,641	7,562,507

GENERAL STATEMENT OF RUSSIAN COMMERCE for 1857.

				Exports.	Imports.
By European By Asiatic By Polish By Finland	Frontier	:		Silver Roubles. 141,363,189 11,945,598 12,056,784 4,323,563	Silver Roubles. 117,941,761 19,347,199 13,833,817 564,022
	Roubles			169,688,184	151,686,799
			£	26,867,287	94,017,076

BRITISH TRADE with RUSSIA.

Year.		Value of Imports om	Declared Real	Value of Exports
	Northern Ports.	Southern Ports.	Northern Ports.	Southern Ports.
1854 1855 1856 1857 1858 1859	1,299,547 20,173 9,999,579 9,929,104 8,452,979	£ 2,952,741 452,996 1,562,345 3,518,480 8,487,091	£ 4,798 	£ 49,508 148,695 976,522 367,890 546,183

In 1857, some modifications were made in the previously existing Russian import tariff. Cotton goods were all reduced considerably, and in some cases to one-fourth the former duty; linen, on the other hand, only to about a half. The following list contains some of the principal items, with the rates of the former and present tariff, in roubles and copecks:—

							1000	100/
							B. C.	B. C.
Coffee	-	-		-	-	per lb.	8 70	2 50
Chocolate	-	•	-	-	-	•	19 0	8 0
Moist Sugar		•	•	-		-	2 80	8 0
Currents	-	-	-	-	-		- 70	40
Figs, Raisins,	Dates, I	runes, &	.	_	_	-	1 40	1 -
Wines, in cas	ks	-		-	-			-
Cyprus Wine		-	-	-	-	-	2 45	2 10
French, Itali	an. Snan	ish. Anst	rian. Hu	nearian.	Mol	davian.		
Wallachi	an, and G	reek Win	68				2 90	2 10
Still wines, in	bottles (excepting	Ruround	lw۱	The	r bottle	- 50	- 30
Bottled Porte	r	-	,	~			- 35	- 20
Nutmega, Clo		Mace	_	-	-	per lb.	7 50	4 0
Snuff (rappee)		_	_	_	P	1 70	- 80
Leather Glove	A bra an	ticles of	Chamoia 1	eather	-	per lb.	3	9 —
Printed Line					_	Par 100	1 40	_ 70
Cambrie Pock	cet Hand	kerchieft		-		_	à	1 25
White Cotton			-	-	-		5 —	3 50
Do. Dyed		_	_	_	_	_	Ř	8 -
Do. Dyed Red	1	_	_	-	1	_	ıı —	š
Do. from Adr			_	_	-	_	ii —	š —
Cotton Waddi		_	_	_	-	_	74 —	ĭ —
Cotton Goods	. &c. : h	fescala, C	alico. Jac	onet Can	1700	Pione.	•	•
&c. Mixed (loods wh	ether wor	en or em	broidered	fm	m 48 to	1 60	- 40
Iron, in one	and a hal	f inch Ba	rs and Re	ils Asc of	άW	mmoht)	4 /	
Iron						per lb.	Formerly prohibited	- 50
Iron under h	alf inch		-	_	-	Por 250	(EE)	- 70
Sheet Iron for				_	-	_	[[4]	- 90
Raw Iron and		Iron	_	_	_		251	- 15
Zinc in block			_	_	_		1 20	- 60
Do. in Sheets			_	-	-		1 80	- 90
Writing Pape		_	_	_	_		16 -	6 —
v abc	~	-	_	_	_	-		•

RUS		25	7			RU	RUS	
						1850	1857	
Silk Goods (with the ex	ception c	f Broca	des)		per Ib.	7 50	1 a.	
Mixed Goods two-third Broadcloth, Smallcloth	ls of the a h. Ladies	bove du	ty Castor.	and	Kersey-		3	
mere - Stuff for Trougers	•	-	-	-	per lb.	1 60 1 66	1 40	
Flannel, Shag, and Plu	sh	.=	-	-		1 —	- 70	
Copperas, Green, Blue, Sulphuric Acid	and Whi	-	-	-	per lb.	1 15 1 60	1 40	
Ground Madder Rasped Dyewoods	:	-	:	:	:	1 - 20	1 50 13	

Raw Sugar, which previously paid from 3r. to 2r. 80c. per lb. was lowered to 3r. and 2r.; refined sugar, formerly prohibited, now enters at 5r. and 4r. per lb.; tobacco leaves were reduced from 12r. to 6 silver roubles.

Baltic Ports. St. Petersburg.—The population of this city in 1857 was returned at 494,656 inhabitants. The entries of ships at St. Petersburg were, in 1852, 1623 ships and 519,710 tons; and in 1857, 2723 ships and 464,464 tons; 209,352 tons were British shipping. In 1857 the movement of shipping at this port, although not quite so great as in 1856, (which was an exceptional year, the first after the termination of the war) was upon the whole satisfactory, indicating, as it does, a progressive increase in tonnage over the ordinary years that preceded it. The increase of steam navigation in the Baltic is remarkable. In 1852, the total number of steamers that entered St. Petersburg was only 178, of which 19 were British; while in 1857 there were no less than 478, of which number 171 were British. The trade of this port appears to be peculiarly well adapted for the employment of steam ships, and the only wonder is that the intricate navigation of the Baltic did not earlier suggest their more extensive employment, as a probable means of lessening the difficulties and dangers of the passage from Copenhagen to St. Petersburg.

The following comparative returns show the imports and exports of the principal articles at this port in the years 1852 and 1857.

EXPORTS from St. PETERSBURG.

Articles.	1852	1857
Gold and Silver roubles Hemp poods (36 lbs.) Flax " Potash " Tallow " ", Candles " Raw Hides " Russian Leather " Iron " Copper " Bristles " Cordage " Linen . pieces Grain . chetwerts Other Goods roubles	2,948,338 1,695,323 749,688 787,277 2,107,184 1,050 19,221 19,890 24,4651 339,425 60,778 246,858 36,436 334,775 8,269,155	10,724,593 1,574,921 605,312 2,692,576 167,116 24,738 377,151 154,420 69,334 42,403 42,360 1,580,219 16,288,023
Total declared value in silver } roubles of 3s 2d	89,536,688	61,604,589

IMPORTS at ST. PETERSBURG.

Riga is the main outlet and warehouse of what are commonly called the Baltic (East Sea) Provinces, viz. Livonia, Kurland, and Isthonia. It is built upon a sandy plain on the right shore of the Dwina, a broad and sluggish, shallow, intricate river. The population in 1858 was stated by our Consul to be about 80,000 persons. The produce shipped yearly is to the value of nearly £4,000,000 sterling. British interests have absorbed more than half of late years. In 1856 and 1857 the mean yearly value of exports to Great Britain was nearly £2,000,000 sterling, and exceeded the gross amount of the corresponding trade with all the other countries by more than £200,000 yearly. France has an increasing commerce with the Baltic Provinces. America has since the late war instituted a small trade, the principal article being tobacco. The average value of the exports for the eight years ending 1853 was, to Great Britain £1,136,584; to all other countries, £1,117,417. The average of the two years following the war, (viz. 1856-57) was, to Great Britain £1,932,064; to all other countries, £1.706.514.

£1,706,514.

The charges on shipping and merchandize are very heavy at Riga. The following are the principal mercantile charges a ship has to defray:—

		-	2 per cent.
	•	-	2
-	•	-	3 .,
g to alse) from	m -	•	8 to 30 allver roubles.
	•	•	2 roub. 40 cop.
	•	•	2 ,, 70 ,,
	-	•	0 80
eight -	•	•	per cent.
m London	-		I per cent. extra.
paid.			
	g to size) from	g to size) from	g to size) from

Archangel. This town is situate on the right bank of the Northern Dwina, about 40 miles from the White Sea, and contains a population of 14,000. The river here is shallow, only allowing vessels drawing 8 to 9 feet to pass. The harbour for larger vessels is at Sollombol, 4 miles below the town, the village containing 8000 inhabitants. The import trade of Archangel is insignificant; in 1857 they were to the value of £56,898, of which £20,709 were from Great

Britain. The exports, however, are of considerable importance, being in the same year to the value of £1,348,650, of which £629,105 were shipped to Great Britain. The following figures give the average trade for five years to 1857, including the two years of war, 1854 and 1855:—

	Total average exports.	Average shipments to Great Britain.
Linseed qrs.	97,609	55,693
Wheat ,,	15,164	15,155
Rye "	208,254	5,047
Oats ,,	204,012	208,070
Flax tons	6,380	4,822
Flax tow "	4,626	3,396
Tallow "	224	146
Train oil "	610	87
Tar and pitch - brls.	99,550	88,114
Mats pieces	622,846	519,044
Deals standard dozen	42,383	40,567
Rye flour tons	5,626	none

PORTS ON THE CASPIAN. Steam boat companies have been established under imperial protection to navigate the Caspian and the rivers running into that sea. The company of the Caspian and Kurr have built steamers on a large scale near Astracan. The government building yards have been removed to the maritime fortress of Baku. In 1853, 169 vessels of 11,474 tons entered the Caspian, and 292 vessels of 29,224 tons cleared.

Ports of the Black Sea and Sea of Azof. Odessa. The population of this city in 1857 was 107,870 inhabitants. It ceased to enjoy the right of a free port in August, 1857. The quarantine system has been abolished here. The neglected condition of the city and of its harbour, and the bad state of the roads leading to the interior, must ultimately affect (unless timely remedies are applied) the commerce it now enjoys, as the natural outlet of the great graingrowing provinces of Russia. The total value of exports from Odessa in 1857 amounted to £4,044,875, and the imports to £2,103,076, making a total foreign trade of £6,147,451. The shipments of wheat in 1853, the year before the war, reached 2,160,000 quarters, but in 1857 were only 654,707 quarters. Indian corn first came into notice as an export in 1844, when 19,161 chetwerts were sent abroad. In 1857 the exports had increased to 632,252 chetwerts, or 455,221 quarters, of the value of £603,039. In the year 1857, 1230 vessels entered Odessa, of a total tonnage of 246,704 tons, 494 of which brought cargoes of the value of £2,154,610. These included 261 British and Ionian vessels, 93 of which brought cargoes of the value of £1.330,769.

brought cargoes of the value of £1,330,769.

SEA OF AZOF. Taganrog. During the year 1857, 857 vessels arrived at this port, of 232,965 aggregate tonnage.
Of these 228 were British and Ionian, 21 bringing cargoes valued at £44,971.
863 vessels cleared, 820 taking cargoes valued at £1,033,950.

Berdiansk is a small town of about 8000 inhabitants, situated in lat. 46° 50′ N., and long. 36° 50′ E., at the extremity of a bay. There is a safe anchorage for any amount of shipping for about 8 miles in every direction, with a depth of 6 to 20 feet water within half a mile of the shore. The average yearly amount of British vessels loading in this port is 25, consisting of 7500 tons, and taking cargoes valued at about £50,000. The average annual amount of vessels of all nations loading in this port is 255, measuring 64,117 tons, and taking cargoes valued at about £589,829. The want of steam tugs in the Straits of Kertch is much felt, particularly by vessels bound up, a detention of 15 days often taking place, and in the autumn this delay frequently obliges a vessel to return to Kertch for the winter, thereby entailing heavy expenses on the owner.

The chief exports in 1857 were 846,280 quarters of wheat; 45,028 ditto of

linseed; 42,568 cwt. of tallow; 1,539,072 lbs. of wool, and 3,373,596 lbs. of

Mariapol. In 1857, 97 vessels, of 27,961 tons, entered here, of which 5 of 1498 tons were British, and 2 of 784 tons, Ioman. The imports amounted to £3467, and the exports to £200,270. The chief shipments were 77,855 quarters of wheat, 16,143 of linseed, and 5554 of rapeseed.

Frist. The exports of this new and rising place in 1857, amounted to £80,188; the chief being 13,605 quarters of wheat, and 587,952 lbs. of washed wool. 19 vessels, of 5057 tons entered; 3 of which of 943 tons were British,

and 3 of 578 tons, Ionian.

Kertch. During 1857, 38 vessels, of 5595 tons entered this port, of which 7 of 1705 tons, were British, and 2 of 347 tons, Ionian. And in all, 1099 vessels, of 273,952 tons reported for the Azof, of which 155 were British, and 60 Ioman. The imports for the year were valued at £12,431, the exports at £66,415. The principal articles were wheat, 14,512 quarters; caviar, 224,568 lbs.; and hides, 102,924 lbs.

Theodosia. Though enjoying 'a fine harbour and a mild and healthy climate, this port has hitherto had but little commerce. It has recently, however, been made the military port of embarkation for the Caucasus, and has been selected as the terminus of the Grand Trunk Railway to Moscow.

The completion of this great work and the emancipation of the serfs, who will be free in a few years to select the most profitable sphere for their labour, together with the natural advantages of Theodosia, will render it the chief city of Southern Russia. The foreign exports at present only amount to £3846, and the imports to about £8000. 51 vessels entered in 1857, of which 4 were British, and 1 Ionian, and 75 Russian coasters, with goods to the value of £39,635. The trade of Eupatoria, Balaclava, and Sevastapol is at present on a very restricted scale.

RUSSIAN FINANCES. The revenue of the empire in 1852 was stated at £43,616,400, and the expenditure about the same; the public debt then stood at E63,185,308. On the 1st January, 1859, it had been increased to £81,260,692. But the largest item of outstanding Russian public securities, are £102,000,000 of credit notes, a kind of paper money payable on presentation, which circulate without interest, and are nominally guaranteed by the reserve of precious metals. deposited in the fortress of St. Petersburg. Treasury bills are also issued from time to time, according to the necessities of the State, bearing 42 per cent. interest, and payable at eight years date; these are issued in series of three millions of silver roubles. In 1854, there were 27 series of them in circulation for 81 millions of roubles, but we have no information as to the number issued

since, nor what proportion has been paid off.

SADDLERY and HARNESS. The average annual exports of these articles now amount to about £300,000 in value; the largest quantities are sent to Aus-

tralia, India, and South Africa.

SAFFLOWER. The imports of this dye-stuft now amount to about 12,000 cwt., of the value of £108,000. It is nearly all received from India, and consumed here. The seeds yielding an abundance of fixed oil are also imported for crushing; the oil makes excellent soap.

SAFFRON, is used as a colouring principle, and an ingredient in several culinary preparations. In 1855, the imports were but 11,000 lbs., it has lately been in greater required, and in 1855 we received about 29,000 lbs., where

lately been in greater request, and in 1858 we received about 32,000 lbs., valued at £42,000. The French saffron is esteemed the best, but the largest quantity

imported comes from Syria and Palestine.

SAGO. The imports of this granulated starch have increased year by year, especially since the reduction of the duty to the nominal amount of 41d per cent. in June, 1853. In 1855 our imports for home consumption were 5430 tons, and in 1858, 6943 tons. Of the 172,513 cwts., valued at £149,352 received in 1858, 135,125 cwts. came from Singapore, 24,647 cwts. from Borneo, and 8679 ewts. from other islands of the Eastern Archipelago.

SAIL-CLOTH. In 1858, 3,629,339 yards of sail-cloth, valued at £156,882,

and sails to the value of £3662 were exported.

SALMON. The maximum weight of salmon caught during any one season in the kingdom has been estimated in the aggregate at 4000 tons weight, value £336,000, being sold at an average of £84 per ton, or 9d per lb.; of which upwards of 2000 tons are disposed of at Billingsgate.

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SALT. Enormous quantities of this mineral are needed for the use of man and the domestic animals. Some years ago an investigation was made to ascertain as accurately as possible the amount of salt manufactured in Europe. From a careful examination of the most accurate returns, Prof. Jameson and Sir David Brewster considered the European salt mines and salt springs afforded annually 14 million to 14 million tons of salt. In Russia the annual average from 1840 to 1850 was 9,675,000 cwts., and the annual consumption 11,1717,86 cwts. The internal consumption of France was then rather more than 200,000 tons, that of England 240,000.

The estimated quantity of salt manufactured in the United States per annum, is as follows:

Doobala

								Rasuers.
Massachusetts	(mos	tly in vats	built alon	g the ser	a shore)	-	-	46,000
New York (Or				•	-	-	-	6,009,000
Pennsylvania	(Allei	chany and	Kiskimine	etas Rive	ers)	-	-	900,000
Virginia (Kan	awha	and King's	Works)	-	· •	-	-	8,500,000
Kentucky (Go	ose Cr	reek)	•	-	-	•	-	250,000
Ohio (Muskin	gum,	Hocking R	iver)	-	-	-	-	500,000
Ohio (Pomero	y and	West Colu	mbia)	-	-	-	-	1,000,000
Illinois	•	-	•	-	-	•	-	50,000
Michigan	•	-	-	-	-	-	-	10,000
Texas	-	•	-	•	-	-	-	20,000
Florida	-	-	-	-	-	-	-	100,000
			Total	-	-	-		12,376,000

Besides the home-made salt, about 14,000,000 bushels are imported. The amount of salt consumed in the United States is calculated to be about 60 lbs. to each inhabitant; in France, 21½ lbs.; in Great Britain, 25 lbs.; in Bengal it

is 13 lbs. per head, in Bombay, 26 lbs., and in Madras, 18 lbs. per head. In 1856, Mr. Robert Hunt estimated the make of salt in the United Kingdom at 1,657,613 tons, of which 1,451,350 tons were produced in Cheshire, 190,000 at 1,505,615 day, or which in the state of t near Carrickfergus. The production in most places is increasing. upwards of one million feet of pannage contained in the salt works of the kingdom, and the rock mines are about 20 in number.

In Cheshire the quantity of salt produced is about 1,000,000 tons per annum. There are 30 brine shafts in the district, and the same number of rock salt mines in operation; these give occupation in one way or other to about 5000 people, and altogether there is a population of from 25,000 to 30,000 depending upon the trade for their support. The aloops and barges which ply on the Weaver carrying away salt and bringing back coals, number about 500. About 5,000,000 tons of brine per annum are pumped from the springs. A few years ago a false panic was created that the brine springs in Cheshire were failing, but closer investigation showed that there was rock salt under an area of eight square miles in Northwich and Winsford, with a depth of 100 yards of pure fossil salt. This would yield 640 millions tons of salt per square mile, equal to a supply of one million tons per annum (the present rate) for a period of 5000 years. Still this would require a considerable outlay of capital in the alteration, reconstruction and removal of works to adapt them to the new state of things. For rock salt has to be converted into artificial brine by dissolving it, before the pure salt can be obtained, and the cost of the commodity would be enhanced to the consumer very materially. The effect of such a change would be to raise the price of common salt from 6s or 7s to at least 10s per ton; butter salt from 8s to 12s, or 14s; while stove salt of various kinds now sold at 10s or 12s a ton, could not be produced for less than 16s to 18s a ton.

In the eight years ending with 1859, the exports of salt from the United Kingdom averaged 19,622,000 bushels yearly; since that period the quantity has been given in the official returns in tons, and the average shipments of the four years, 1858-59 was 636,244 tons. About 40 bushels of salt go to the ton. 80,000 tons of rock salt are exported annually, chiefly to Prussia, to avoid the

duty on manufactured salt.

Salt is taxed in nearly every country in Europe, and even elsewhere, since the State of New York derives about 33,000 dollars per annum from that source. In most countries the tax exists under the form of a monopoly. British India furnishes a remarkable example, drawing a revenue of about £2,000,000 from it. In Austria this monopoly only extends to the right of working all the salt mines or ponds within the realm, but the retailing of the salt is left to private enterprise. In 1855 the net produce of the monopoly was nearly £3,000,000. Saxony gets all her salt from Prussia under a treaty. Before 1840 every Saxon taxpayer was bound to take a certain quantity per annum. From 1849 to 1851 the net revenue from this source amounted in Saxony to £68,000. In Spain, the State in 1850 sold 1,730,944 fanegas of salt (the fanega is about 3½ bushels), making about 14lb. per head, exclusive of 208,937 fanegas for cattle. The total gross revenue is about 95,000,000 reals (the real is 2½d). The salt works of Bavaria yield a net revenue of about £210,000, including that derived from salt for manure. In Hanover, salt for manufactures and agriculture only is free.

In Tuscany the salt monopoly yielded a revenue in 1858 of £152,033.

SANDWICH ISLANDS. The number of vessels that entered at the port of Honolulu in 1857 was 75, measuring 24,200 tons. The imports average £300,000, and the exports £120,000, the customs' receipts £31,000.

The value of the domestic produce exported in 1857 was 423,304 dollars, of foreign produce 222,223 dollars. The number of entries of whalers was 387: 16,144 gallons of spirits were consumed; 170,306 gallons of sperm oil, 2,018,027 gallons of whale oil, and 1,295,525 lbs. of whale bone, were transhipped here from the whalers.

SAN SALVADOR. The trade of this Republic shows a steady increase in the last few years. In 1858 the entries of vessels were 156 of 55,163 tons, of which 31 of 8,732 tons were British. The largest trade is carried on with the United States. The exports in 1857 were valued at £260,820, and consisted of 7450 serons of indigo, 1813 serons of tobacco, 2082 mille of cigars, 7890 lbs. of balsam of Peru, 27,824 hides, 389 marks of silver, 12,225 quintals of sugar, and 3486 quintals of rice. The value of the imports in 1859 was £261,275, and of the exports £398,330.

The revenue of this State in 1858 amounted to 725,978 dollars, derived from, Customs 244,192 dollars, spirits 157,513 dollars, and miscellaneous sources 324,278 dollars. The expenditure was 630,794 dollars, leaving a surplus of 95,184 dollars. The public debt on the 30th September, 1858, stood at 341,090 dollars, 1st, 2nd, and 3rd class bonds, and these were redeemed in the year by

bills amounting to 194,911 dollars.

This rapid growth in the commerce of the State may be mainly attributed to the opening of the resources of the country by the line of steamers connecting it with Panama, and the more immediate contact into which foreigners have been consequently brought with that portion of the Continent, which for want of proper facilities for communication had hitherto been almost entirely isolated from the rest of the world. The great progress in the value of the exports is owing to the increasing attention now being paid to agriculture.

Coffee, rice, and cochineal are attracting the attention of the producers; and with a large labouring population, and a soil and climate suited for the production of these articles, it is evident that in a few years Salvador will be ranked

amongst the most productive countries on the Pacific coast.

The import duties on foreign goods are 20 per cent., paid as follows—8 per cent. in cash, 6 per cent. in Government drafts, and 6 per cent. bonds, first and second class.

The exports are free with a few exceptions: a small permit duty is levied on

each seron of indigo.

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Salvador is eminently adapted for agricultural pursuits. Possessing a temperate climate, rich and varied soil, magnificent plains watered by innumerable streams, and mountains of gradual declivity covered to their summits with the most luxuriant vegetation, it presents a field for every description of cultivation. The low lands yield the products of tropical climates, and the high lands the grains and fruits of northern climates. Notwithstanding the unsettled state of affairs in Central America for some years, and the active part taken by Salvador in the war in Nicaragua, the trade of the country has made fair progress. The increase in the imports may be attributed, in part, to the lowness of the duties in comparison with those of Guatemala, a circumstance which has induced the merchants of the latter to disembark at Acajutla and La Union a considerable portion of their cargoes. A quantity of these goods, it is well known, is con-

stantly smuggled over the frontiers.

SARDINIA. This kingdom now includes not only the island of that name, but Sicily which was annexed to it by conquest in 1860, and several important Continental States, as Sardinia, Piedmont, Genoa and Tuscany, the Æmilia,

Naples, and other Italian Provinces.

Of the large present debt owing by Sardinia, about £8,000,000 have been expended on railways, which are producing a fair rate of interest; another £8,000,000 were spent in various ways during the war with Austria; £2,000,000 were absorbed in the expedition to the Crimea, while very large sums have been incurred in the Italian war. A guaranteed loan of £2,000,000 was made to Sardinia by Great Britain in 1855 and 56. The population of this kingdom in 1858, exclusive of its recent acquisitions of territory, comprised 5,194,807 inhabitants.

The revenue and expenditure of this kingdom in the four years ending with 1857 averaged £5,500,000. The public debt on 1st Jan. 1858 was £27,080,809. The number of merchant vessels owned in 1854 was 3174, of 177,852 tons. The entries and clearances 3720 vessels and 500,000 tons. About 230 British ships enter the ports. The value of the imports in 1857 was £16,000,000, of which two-thirds was entered for consumption. The exports in 1855 were of the value of £12,523,000, of which £7,720,710 were Sardinian produce, and in 1857, £14,605,000. Into the island of Sardinia the imports in the same year were to the value of £587,815, and the exports £460,070.

The vessels that entered at Cagliari were 707 of 114,112 tons, of which 54

vessels and 14,097 tons were British.

SAXONY. The population of this kingdom in 1858 was 2,122,148 inhabitants. The capital, Dresden, had, including the military, 117,750; Leipsic,

Mining is an old and important branch of industry in the kingdom. districts into which the mines are officially divided are, Altenberg, Frieberg, Marienberg, and Schwarzenberg, all situate in the Erz-gebrige, or ore mountains. Altenberg chiefly produces tin; Frieberg is the seat of the silver mines; Marienberg, tin and silver; and Schwarzenberg, coal, iron and cobalt. The value realized by mining in these districts in 1856 was £266,806; the produce of the silver furnaces, £354,557; and of the coal, £340,000. The number of mines of all kinds worked was 416, employing 12,581 hands; at the furnaces in smelting, 1045.

The trade of Leipsic as reported by the British Consul shows that in 1858 385,438 centners in weight of German manufactures, valued at £11,690,817, were brought on sale, and 168,631 centners or cwt. of foreign manufactures, valued at £3,838,020, of which 139,948 centners, valued at £3,115,788 were British manufactures. The live stock in the kingdom in 1850 comprised 88,242 horses, 610,557 cattle, 547,334 sheep, 208,983 swine, and 86,547 goats. There were 722 distilleries at work in 1851, which made 3,214,020 gallons of spirits, chiefly distilled from potatoes, and 766 breweries, where 25,365,000 gallons of beer were made in the year.

The receipts and expenses of the kingdom were fixed by resolution of the Diet extraordinary for 1859 at 11,203,540 thalers. The public debt on the close of 1858 stood at 60,729,552 thalers.

SEA

SEALS. The seal fishery is now the most profitable branch of trade in the colony of Newfoundland. Twenty-five years since, about 50 vessels of 50 or 60 tons each, were engaged in it; in 1852 it employed 367 vessels of 35,760 tons aggregate tomage, and 18,000 men. The vessels are from 75 to 200 tons, but those of 130 tons, which carry crews of 40 or 50 men, are preferred. The voyaçe is begun early in March, rarely exceeds two months, and is often completed in three weeks. Two and three voyages are sometimes made in one season.

three weeks. Two and three voyages are sometimes made in one season.

The species of seal which chiefly resort to the Newfoundland coast are the Hood seal (Stemmatopus cristatus) and the Harp seal (Phoos Groenlandica and oceanica.) They whelp their young in January and February on the ice fields of Labrador. The whelping ice, as it is called, is floated southwards by the ocean currents, and is always to be found on the coast of Newfoundland after the middle of March.

The total number of scals cut up for oil rendering in Newfoundland was in

1857	-	-	530,738	1	1859	-	•	296,308
1858	-	-	398, 166	- 1	1860	-	-	336,319

The weight of the carcases in the last two years averaged 112,000 cwt. The yield of oil is about 11 gallons per cwt. The exports of seal oil from Newfoundland during the five years ending in 1850 averaged 4291 tuns for each year, and for the five years ending 1855. 6353 tuns annually.

and for the five years ending 1855, 6353 tuns annually.

In 1850 the average number of seal skins exported from the island was stated at 511,630, valued at £76,596, and the seal oil at 6200 tuns, of the value of £180,000. In 1857, 496,113 seal skins were exported, of the value of £99,217, and 7115 tons of seal oil, valued at £265,131. The imports of seal skins into the United Kingdom from Newfoundland and Labrador in the five years ending 1858 averaged about 400,000. The annual number of seals taken on the Labrador shore is 7000 or 8000.

The vessels employed in the eastern Greenland seal fishery are of various sizes, from 130 to 550 tons. The largest vessels carry from 60 to 70 hands, the smallest 35 to 40. The average quantity of oil to 1000 seals is allowed to be 10 tuns. The total quantity of seals taken by British vessels fitted out from the northern ports of the kingdom for Greenland and Davis' Straits in the eleven years ending with 1859 was 1,035,846. Seal skins have varied in price, according to size, from 4s to 9s; seal oil from £30 to £32. 10s. Although fish oils are being supplanted by vegetable oils for burning purposes, the prospect of increased trade with France, and the falling off in the American fisheries, give hope of better prices and improved demand.

SHEEP. The rearing of sheep in the United Kingdom and many of her Colonies occupies a large share of attention. According to the agricultural returns there were in Scotland in 1857 about 6,000,000 sheep; in Ireland in 1858, 2,500,000; England and Wales have probably about 28,500,000 sheep, which would bring the total number in the United Kingdom up to 38,000,000. But we may safely take the whole number in the United Kingdom at 40 millions. Averaging these at 30s per head, we have an aggregate value of £60,000,000 for the sheep stock of the British islands. Assuming one-fourth of these to be slaughtered annually, and their average weight to be 80 lbs., this gives a yearly supply of 800 million pounds of mutton for our population, worth probably £20,000,000 sterling. About 4,000,000 sheep and lambs are required annually for the supply of London, of which more than half are sent up to market slaughtered. We only commenced to import sheep from abroad in July 1842, when 650 head came in upon the repeal of the prohibition. The number of sheep and lambs imported in 1859 was 250,580; and the average of the ten years was 200,000 head.

In the Australian Colonies and New Zealand there were in the year 1857

about 18,000,000 sheep, of which New South Wales had 8,000,000, Victoria 5,000,000, South Australia 2,000,000, Tasmania 1,600,000, New Zealand 1,000,000, and West Australia a few hundred. The Cape Colony has about 6,500,000 sheep.

On the Continent, Russia has upwards of 50,000,000 head, France 36,000,000, Austria 17,500,000, and Prussia 16,000,000. The United States had in 1855,

23,500,000 head.

SHIPPING. The following series of tables will serve to indicate the progress of the shipping trade of the United Kingdom, by comparison with those for 1840, given at page 613. The registered shipping has increased from 3,311,538 tons in 1840 to 5,609,623 tons in 1858.

On the 1st January, 1850, the new Navigation Laws came into operation, by which Foreign shipping were admitted to participate in the carrying trade of the country, and the following shows the general progress made since:—

ENTRIES of TONNAGE with CARGOES at PORTS in the United Kingdom.

		1849.	1859.
Colonial Trade Foreign Trade Coasting Trade	: :}	6,919,900 11,967,478	2,272,966 6,816,584 16,532,117
		18,887,873	25,621,667

CLEARANCES of TONNAGE with CARGOES from PORTS in the United Kingdom.

		1849.	1859.
Colonial Trade Foreign Trade Coasting Trade	: :}	7,084,488 12,915,584	2,201,629 8,040,995 16,509,471
		20,000,072	26,752,095

The following table shows the movements of Shipping in Ports of the United Kingdom, comparing the British with the Foreign tonnage, and includes vessels both with cargoes and in ballast, except 1859, which are laden vessels only:—

	Tox	eawil edani	DS.	TONNAGE OUTWARDS.						
	British.	Foreign.	Total.	British.	Foreign.	Total.				
1842	8,234,725	1,205,303	4,500,028	8,875,270	1,252,176	4,627,446				
1843	3,545,346	1,301,950	4,847,296	3,635,833	1,341,433	4,977,266				
1844	3,647,463	1,402,138	5,049,601	8,852,822	1,444,346	5,297,168				
1845	4,810,639	1,735,079	6,045,718	4,285,451	1,796,136	6,031,587				
1846	4,294,733	1,806,282	6,101,015	4.393,415	1,921,156	6,314,571				
1847	4.942,094	2,253,939	7,196,033	4,770,370	2,312,798	7,083,163				
1848	4,565,533	1,960,412	6,525,946	4,724,027	2,056,654	6,780,681				
1849	4.884.210	2,035,690	6,919,900	4,785,428	2,299,060	6,994,488				
1850	4,700,199	2,400,277	7,100,476	4,742,345	2,662,243	7,404,588				
1851	4,938,386	2,933,708	7,872,094	4,882,490	3,225,614	8,108,10				
1852	4,934,863	2,952,584	7,887,447	4,459,321	2,413,260	6,872,58				
1853	5,055,343	3,887,763	8,946,106	4,551,498	4,234,124	9,447,10				
1854	5,374,551	3,786,815	9,161,366	4,683,754	4,137,423	9,507,72				
1855	5,270,792	3,680,447	8,951,239	5,036,926	3,889,227	9,538,28				
1856	6,390,715	4,162,419	10,553,134	5,883,861	4,480,859	11,035,91				
1857	6,853,705	4,021,494	11,475,199	6,204,198	4,136,201	10,340,39				
1858	6,439,201	4,522,499	10,961,700	5,873,986	4,062,719	9,936,70				
1859	5,388,953	8,700,597	9,089,550	6,224,318	4,018,306	10,242,62				

The Foreign shipping engaged in the carrying trade with the United Kingdom before the alteration of the Navigation Laws, compared with 1859, were respectively as follows:—

	18	49.	18	59.
Entries Clearances	Vessels. 10,578 9,946 20,524	Tons. 1,680,894 1,667,726	Vessels. 16,835 19,812 36,647	Tons. 2,772,151 4,063,968 7,856,139

In 1842 the shipping registered as belonging to the United Kingdom and the Colonies numbered 30,815 vessels, measuring 3,619,850 tons, and employing 214,609 seamen. In 1859 the shipping belonging to Great Britain and her Colonies, exclusive of India, for which there are no returns, numbered 38,200 vessels, registering 5,660,402 tons, and employing 291,431 men. exclusive of masters, so that in eighteen years we have increased our mercantile marine by 7385 ships, and more than two million tons. The proportionate average tonnage at present shows a much larger class of vessel in use now than fifteen or twenty years ago. Great Britain owns one-third of the tonnage of the world, and is year by year increasing her superiority and adding first-class ships to her mercantile navy.

In estimating the extent of British shipping we must not overlook the rapid strides our Colonial marine is making, which forms a most important item in our shipping returns, adding fully one-eighth to the general tonnage. In our Australiau settlements, in India, and in the British North American Provinces, the mercantile shipping and colonial steam marine forms a very considerable item in our commerce, carrying trade and national wealth.

The aggregate tonnage owned by the Colonies in 1850 and 1859 was as follows:—

	1	850.	1859.			
European Settlements African Settlements Australasian Settlements - British American do West Indies	Ships.	Tonnage.	Shipa,	Tonnage.		
	177	25,970	156	31,6:0		
	213	15,002	297	27,704		
	779	56,836	1479	147,156		
	5582	418,339	6779	600,224		
	724	19,926	675	22,595		
	829	101,756	no re	t urns.		

REGISTREED SEIPTING of the Barrier Entries on 31st December 1851 and 1859, and Ships built in the same years.

			Ships I	Ships Registered.				Ships Bullt and Registered.	d Registered.	
		1881.			1869.		1881.	1.	1859.	.66
	Veseela	Tona	Men.	Vessela	Tona	Men.	Ships.	Tone.	Shipe.	Tons.
United Kingdom Channel Islands Colonies	25,194 849 8,201	8,601,739 60,615 669,741	188,964 5,798 46,166	26,804 898 10,498	4,591,250 71,941 997,211	215,551 6,697 70,283	673 80 680	189,637 2,926 141,116	939 81 605	185,970 3,041 88,307
Total	34,244	4,832,085	240,928	88,200	5,660,403	291,431	1863	883,679	1575	282,318

Accours of the Toursas of Shirrine entered Inwards and Cutwards at the principal Ports of the United Kingdom in the year 1868.

	_		_	-	-		_	-			-	-	_					_		-			
	arda.	Foreign.	816,123	1,025,778	89,659	593, 623	251,147	3,276	49,127	236,750	8	106,863	11,560	83,490	38,936	10,777	1,485	19,181	17,252	1,877	20,737	11,429	9,450
Trade.	Outwards	British.	664,478	652,485	93,909	724,207	275,068	19,179	71,135	362,710	488	68,336	5,844	130,784	8 09'60 8	5,893	4,401	59,095	36,333	6,860	9,762	4.970	3,880
Foreign Trade	rds.	Foreign.	954,903	994,368	74,109	858,310	287,396	8,701	40,738	162,391	404	61,536	25,315	54,613	38,639	12,716	9,509	84,319	28,538	14,590	46,430	49,248	24,654
	pred I	British.	1,169,218	788,592	53,648	842,229	324,845	26,961	54,875	264,016	250	16,264	066'08	76,479	60,947	18,007	106,2	81,439	86,144	12,689	82,723	29,847	17,668
Colonfal.	Ontwards		719,799	686,261	40,219	68,919	18,773	5,775	5,497	75,138	.	49,121	26,260	42,660	107,291	48,920	14,385	10,759	6,793	4,348	81,871	17,655	878
Colo	Towards		887,239	597,894	78,311	11,796	89,235	18,019	2,590	23,843	1,413	9,346	88,976	16,024	800,008	67,648	16,180	8,407	890,4	970%	40,595	19,253	1,791
	Vessels.	Outwards.	563,412	1,036,293	265,182	270,376	103,867	19,264	32,089	196,512	74,730	27,408	177,703	42,686	417,339	8,688	1,487	206,257	32,646	154,195	502,816	173,554	430,859
Coastwise.	Steam Vessel	Inwards.	898,596	1,056,073	263,180	122,852	106,306	15,794	29,433	25,547	68,569	45,303	195,748	60,799	410,192	20,627	ı	213,269	33,100	156,204	455,976	172,444	434,903
Coast	Vessels.	Outwards	452,855	438,700	96,557	1,261,530	96,151	75,204	138,489	1,271,481	225,490	877,289	81,303	899,839	144,259	7,015	270	43,729	26,954	48,419	191,089	75,532	49,895
	Salling Vessels	Inwards.	2,052,441	439,511	168,868	149,611	40,900	88,928	19,843	107,734	28,048	69,687	182,414	247,383	94,080	19,881	3,255	53,326	129,630	116,253	421,273	153,146	286,014
			•	•	•	•	•	•	•	•	٠	•	•	•	•	•	•	i	•	•	•	•	•
			١.	•	•	•	•	٠	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
			London -	Liverpool -	Bristol	Newcastle -	Hell .	Goole	Stockton -	Sunderland	Whitehaven	Newport -	Plymouth	Swanses -	Glasgow -	Greenock -	Port Glasgow	Leith	Dundee -	Aberdeen	Dublin -	Cork	Belfast
			Londo	Liver	Bristo	Newc	Hull	Googe	Stock	Sande	White	Newp	Plym	8wan	Glasg	Green	Port (Leith	Dand	Aberr	Dubli	Cork	

ACCOUNT of the TONNAGE of SHIPPING Registered at each of the Ports of the United Kingdom, including the Channel Islands, on December 31, 1858.

		Sailing	Vemels.	Steam Vessels.		
PORT	rs.	Under 50 Tons.	Above 50 Tona			
		Tons.	Tons.	Tonnage.		
ENGLAND:						
Aberystwith Arundel -	: :	4,981 1,193	21,089 6,838	- 32		
Barnstaple		1.603	2,986	-87		
Beaumaris		4,584	18,671	_		
Berwick - Bideford -) 517	2,178			
Boston -	: :	1,909 3,468	8,311 3,280	74		
Bridgwater		2,865	18,751	18 21		
Bridport -		25	1,254			
Bristol - Caernaryon	: :	5,285	68,985	4,769		
Cardiff -	: :	5,836 606	28,831	99 3 87		
Cardigan -		8,692	13,183 7,170			
Carlisle -		511	l 1.228]	447		
Chepatow Chester ~		1,187	1,116	185		
Colchester	: :	2,831 3,830	4,130 11,455	2,906 23		
Cowes -	: :	8,678	4,689	76		
Dartmouth		5,241	88,984	164		
Deal - Dover -	: :	801	1 -			
Exeter -	: :	966 768	2,612 19,797	133 87		
Falmouth -		1,424	11,485	32		
Faversham		5,109	13,812	9		
Fleetwood Folkestone	: :	1,155 155	7,018	968		
Fowey -	: :	1,521	2,292 12,078	126		
Gainsborough		389	226	875		
Gloucester		7,355	8,754	34		
Goole - Grimsby -	: :	9,003 8,212	23,589	1,120		
Hartlepool		225	2,266 88,198	2,991 3,867		
Harwich -		2,045	5.419	_		
Hull - Ipswich -	: :	11,252 1,909	41,281 13,777	18,364		
Lancaster		1,325	10,403	. 263 825		
Liverpool Llanelly -		9,275	882,074	63,606		
Lianelly -	-	1,239	4,797	36		
Lowestoft Lyme -	: :	2,287	4,096 1,907	926		
Lynn -		2,275	14,003	-13		
Maldon -		2,741	5,967	-		
Maryport - Milford -	: :	384	17,409	65		
Newcastle	: :	2,407 8,428	19,087 121,088	10,178		
Newhaven		209	2,769	20,170		
Newport - Padstow -	-	677	12,373	327		
Panzance -	: :	2,482 526	9,998	-		
Plymouth	: :	6,656	6,828 49,302	824		
Poole -		983	14,446	22		
Portsmouth Preston -		4,258	11,783	284		
Ramsgate -	: :	3,006 1,666	2,947 8,104	439 10		
Rochester		11,846	8,083	186		
Rye -		1,486	5,286	21		
Saint Ives Scarborough	: :	1,150	12,445	711		
Scilly	: :	2,789 458	85,230 6,784	117 67		
Shields -		685	968,177	2,654		
Shoreham -	• •	857	16,471	81		
Southampton Stockton -	: :	3,877 844	14,871	4,071		
Sunderland	: :	1 3.268	26,000 223,060	3,409 7,539		
Swansea -		1,553	15,187	791		
Teignmouth		239	7,157	19		

		Sailing	Vessels.	Steam Vessels.
Ports.		Under 50 Tons.	Above 50 Tons.	
		Tons.	Tons.	Tonnage.
ENGLAND sontinues	L			
Truro Wells	:	367 9,286	6,948 7,727	29
Weymouth -	•	616	7 510	419
Whitby Whitehaven -	-	1,928 141	72,459	60 564
Wisbeach -	:	716	72,459 27,858 9,895 2,491	1,089
Woodbridge - Workington -	:	1,106 125	2,491 20,211	
Yarmouth -	-	11,238	27,187	17 647
London	-	22,379	688,485	195,268
Total, England	-	214,785	8,129,821	586,560
SCOTLAND:				
Aberdeen -	:	418 486	68,731	4,065
Ayr Allos -	:	807	4,081 15,010	267 232
Arbroath	-	608	18,311	
Benff Borrowstoness -	-	1,160 607	14,840 4,964	- 53
Campbeltown -	-	1 406	856	884
Dumfries Dundee	•	1,899	18,554	85
Glasgow	-	4,676	48,307 164,787	2,344 59,410
Grangemouth .	-	365	7,179	1,498
Greenock - • Inverness - •	:	5,884 4,005	78,627 8,999	5,774
Irvine	-	1 1,235	18,891	298
Kirkaldy Kirkwall -	-	1,457 631	5,989 2,334	228 26
Leith -	-	2,088	19,488	7,869
Lerwick -	-	1,296 276	737	-
Montrose Perth -	=	197	16,219 4,106	898
Peterhead •	:	864	12,501	327
Port Glasgow - Stornoway -	:	1,438 797	2,962 2,452	502
Strangaer - •	-	843	858	+ =
Wick - • Wigtown - •	-	758 1,371	2,779 1,226	188 316
Total, Scotland	-	85,596	532,233	87,268
		60,036	002,200	67,208
IRELAND: Ballina -	_	26	286	27
Belfast	-	5,585	69,499	8,114
Coleraine	•	160	42,423	_
Drogheda Dublin	:	4,268 115	4,646	5,940 1,828
Dublin • •	-	9,156	28,196	7 10,031
Dundalk Galway	:	144 898	1,861 986	1,545
Limerick	-	829	5,556	1,678
Londonderry - Newry -	:	184 9,246	5,899 8,543	2,167 406
Ross	-	61	4,178	
Skibbereen - Sligo -	:	2,093 292	51 4.232	269
Strangford -	-	918	2,899	209
Traice Waterford -	•	351 1,417	82 12,808	
Westport Wexford	-	90	14,000	8,893
1	-	954	8,034	223
Total, Ireland -		29,287	195,124	35,606
ISLE OF MAN -	-	7,157	8,277	1,193
CHANNEL ISLANDS -	•	5,599	52,891	228

TONNAGE of VESSELS employed in the Foreign and Colonial Trade of the United Kingdom (including their repeated Voyages), separating British from Foreign Vessels, also Stram from Sailing Vessels, and distinguishing the Trade with each Country, in the Year 1858.

		T	AJEDA.	<u> </u>	
Countring.					VARDO.
COUNTRIES.		British.	Foreign.	British.	Foreign.
		Tons.	Tons.	Tons.	Tons.
Russia	Seiling	82,037 3 26,269	9,955 \$88,208	90,938 222,082	11,214
	Steam	19,568	6,949	18,151	814,945 6,093
Sweden	Salling	85,989	215,295	28,908	161,701
Norway	Steam Sailing	8,210 4,897	9,232 259,862	4,039 8,956	11,886 344,157
Denmark	8team	61,272	2,971	87,650	5,110
	Sailing Steam	26,051 41,411	156,661 19,564	59,504 44,776	454,137 21,832
Pruscia	Sailing	103,146	289,420	109,435	814,807
Germany	Steam Salling	305,674 812,782	172,670 248,201	902,085 289,808	149,975 227,193
Holland -	(Steam	272,507	78,773	231,177	76,881
	Sailing Steam	966,827 116,025	223,725 26,375	243,876 117,033	46,791 26,619
Belgium	Sailing	96,824	103,550	70,721	25,574
Channel Islands -	Steam Sailing	85,403 119,002	8,636	86,968 67,141	174
France	(Steam	455,175	39,285	458,312	25,178
France -	Sailing Steam	504,836 37,785	478,636	545,901	388,146
Portugal	Salling	70,504	91,189	36 ,059 66,378	358 50,489
Spain	Steam	17,456 123,717	21,064	18,122	25,305
-•	Sailing Steam	17,124	58,554	205,159 25,380	194,767 697
Gibraltar	Sailing	8,165	4,991	80,986	11,787
Italian States	Steam Sailing	58,691 85,894	69,552	55,110 149,293	789 943,114
Malta	Steam	425		32,489	
	Sailing Steam	6,39 0 711	1,455	45,934 2,093	41,904
Ionian Islands -	Salling	5,780	502	10,894	12,616
Greece	Steam Sailing	18,249 11,318	750	8,202 9,274	666 18,963
Turkey	Steam	87,006	'~	29,271	1,942
1	8 Sailing	49,475	84,795	56,267 115	98,613
Wallachia and Moldavia	Sailing	86,198	64,879	6.563	4,301
Syria	(Steam	8,966	_	1,513	
'	Sailing (Steam	4,127 93,357	8,957 800	5,845 78,022	1,470 613
Africa	Sailing	194,0%	76,120	211.218	80,808
Asia	Steam Sailing	83,064 687,668	90,897	29,208 885,312	275,795
British North American	Steam	18,071		17,815	
Colonies	§ Sailing § Steam	699,414	182,283	587,615 1,127	54,835
British West Indies -	Salling		16,298	204,583	17,743
Foreign West Indies -	Steam Sailing	51,857 57,522	559 87,356	47,3 18 69,670	1,118 14 0,3 69
United States -	(Steam	136,729	2,237	139,095	48,319
	Sailing Steam	154,026 20,052	915,284 1,925	179,877 20,677	1,051,713 153
Central and Southern States	Sailing	341,068	139,794	258,114	108,809
Falkland Islands -	Steam	685	=	_	
The Whale Fisheries	(Steam	1,823		1,505	
AMO 17 HAIO E IMIGNIOS	(Sailing	14,328		14,404	209
Total -	-	6,139,204	4,522,499	6,452,204	4,896,077

COLONIAL SHIPPING MOVEMENTS in the Year 1857.

Possessions.		TONNAGE			
		Ent	ered.	Clea	ared.
		Total.	From United Kingdom.	Total.	To United Kingdom.
East Indies -	•	Tons. 2,206,932	Tons. 529,258	Tons. 2,342,348	Tons. 629,305
North America:-		-40 407-			
Canada New Brunswick	-	748,425* 587,505	477,963 94,887	731,367*	683,681
Nova Scotiat -	-	487,615	94,887 64,839	659,277 501,869	388,421
Prince Edward's Island	-	62,560	No return.	75,336	45,971 No Return.
Newfoundland -	-	203,162	49,220	182,045	28,767
Bermuda -	-	43,056	5,215	42,994	8,255
Honduras -	-	28,227	6,835	81,827	18,304
West Indies:		87,559	4,884	24.42	
Jamaica -	:	94.878	48,604	84,452 92,103	5,098
Virgin Islands -	-	8,800	20,001	4,864	43,580
St. Christopher	•	21,008	5,897	20,616	5,590
Nevis	-	8,802	1,624	8,860	1,514
Antigua -	-	87,064	10,074	87,303	11,834
Montserrat - Dominica -	:	6,516		6,492	
St. Lucia -		9,274 9,291	1,721 2 ,365	8,754 9,860	2,958
St. Vincent -	-	20,476	6,670	20,335	2,975 8,036
Barbados -	-	96,233	80,342	105,568	30,193
Grenada -	•	18,829	7,709	18,218	5,819
Tobago -	-	6,153	2,966	5,359	2,836
Trinidad - British Guiana -	-	78,710	21,829	75,111	25,619
Falkland Islands -	-	No Return. 18.415	No Return. 6,471	No Return. Ditto.	No Return.
Australia:	-	10,110	0,4/1	Diua	Ditto.
New South Wales	-	851,418	113,436	877,147	88,060
Victoria -	-	694,564	290,680	684,526	64,717
South Australia Western Australia	-	145,567	89,803	146,770	9,580
Tasmonia -	:	59,822 164,008	5,520 22,128	59,452	641
New Zealand -	-	78,309	No Return.	167,058 76,524	6,742 No Return.
Hong Kong -	-	541,063	18,416	No Return.	Ditto.
Labuan	-	11,328		9,167	-
Ceylon	-	444,781	63,353	481,782	40,385
Mauritius - Natal -	-	271.994	40,317	261,356	61,304
Cape of Good Hope	:	8,117	8,161	7,978	328
St. Helena -		382,112 175,236	158,560 4,255	862,890 21,062	85,954 15.700
Gold Coast -	-	107,701	47,668	107,701	15,700
Sierra Leone -	-	51,792	21 632	51,527	15,603
Gambia -	- 1	32,894	6,470	88,488	5,748
Gibraltar - Malta	-	879,896	225,436	868,512	843,315
Ionian Islands -	-	482,996 848,494	95,568 126,894	481,292	87,312
	-	030,104	140,034	352,163	50,630

Total Shipping engaged in Sea Navigation.
 Nine Months ending 30th September, 1857.

EXTERNAL COLONIAL TRADE in the Year 1857.

Porsessions.	DAPO	RTS.	EXP	ORTS.
2 OBJECTION	Total.	From United Kingdom.	Total.	To United Kingdom.
	8	£	2	£
Bast Indies	28,608,284	16,739,897	26,591,877	10,635,607
North America	1			
Canada	8,871,885	8,950,781	6,076,491*	2,186,683*
New Brunswick -	1,418,948	538,298	917,775	637,436
Nova Scotia Prince Edward's Island -	1,449,278 258,728	479,718 87,802	1,027,188	75,769
Newfoundland -	1,413,423	567,363	134,465 1,651,165	25,613 545,293
Bermuda	136,914	41,027	\$5,103	4,728
Honduras -	268,692	169,928	440,272	829,052
West Indies:	1	[,	,	
Bahamas	211,423	24,699	140,195	54,613
Jamaica	797,150	448,151	1,235,497	964,782
Virgin Islands	5,634		10,849	
St. Christopher	144,582	69,908	208,168	186,016
Nevis Antigua	36,254 234,058	12,385 119,763	51,954 235,269	23,974
Montserrat	12,783	119,103	94.789	277,205
Dominica -	60,911	19,318	98,046	69,663
St. Lucia	90,064	21,550	99,908	90,142
St. Vincent -	185,203	97,788	220,956	201,423
Barbados	976,306	475,856	1,345,361	987,822
Grenada	109,062	87,481	172,218	159,562
Tobago	60,424	18,394	76,122	63,231
Trinidad	803,038	888,467	1,073,878	787,300
British Guians	886,016 No Return.	No Return. Ditto.	1,831,371 No Return.	No Return.
Anstralia:-	No permi	Diam.	We wermin	Disto.
New South Wales -	6,729,408	3,864,901	4,011,952	1,967,703
Victoria	17,256,209	10,122,201	15,079,512	11,483,781
South Australia -	1,693,052	1,016,814	1,958,572	666,136
Western Australia -	94,532	67,185	59,947	39,196
Tasmania	1,271,087†	750,591†	1,354,655†	448,2354
New Zealand	992,995	460,290	869,395	128,319
Hong Kong	No Return.	No Return.	No Return.	No Return.
Cevion -	95,257 8,106,664	631,368	7,035 2,588,460	1,348,614
Mauritins -	2,891,106	759,621	2,303,786	1,202,381
Natal	184,549	129,818	82,497	85,295
Cape of Good Hope -	2,637,192	1,911,122	1,988,496	1,496,614
St. Helena	189.354	58,896	85,139	10,877
Gold Coast	118,270	76,410	194,394	90,898
Sierra Leone	172,315	143,204	288,728	90,540
Gambia	118,620	60,714	201,628	19,031
Gibraltar	No Return.	No Return.	No Return. 1,850,872	No Return.
Ionian Islands	2,361,046 1,092,051	19,181 No Return.	771,638	833,608 No Return.
	1,002,001	I TO MODULE	I,	

SIAM. There are no data from which we can compute with any degree of accuracy the present population of Siam. The number of British vessels which entered and departed from Bangkok, in 1857, was 119 ships and 36,628 tons. The value of the imports in the same year (including those by Siam and China vessels) was £525,732. That of the exports to Europe £85,887; to Eastern ports £432,257, of which £248,177 was in British vessels.

On the 3rd April, 1855, Sir John Bowring arrived and negociated a new

Exclusive of Ships built in Canada and sold in the United Kingdom, and of 20 per cent-additional for Short Returns.
 At the Ports of Hobart Town and Launceston only.

English treaty, which was signed on the 18th April, and copies of the treaty were exchanged on the 17th March, 1856. On the 9th November, 1855, the first steam-boat was built in Siam, by the son of the prime minister, who, just twenty years before, completed the building of the Ariel, the first square-rigged vessel of the Siamese. The First King took an excursion in this steamer, "The Royal Sest," the next day. The Siamese now own 22 steamers, of which 14 are paddle and 8 screw; 9 belong to the First King, and 2 to the Second King. The mercantile marine of Siam also numbers 70 sailing vessels, registering in the aggregate 22,523 tons, eleven of these vessels are over 500 tons. The principal exports from Bangkok in 1859 (all in piculs of 1834 lbs.), were rice, 839,751; paddy, 6230; sapan wood, 203,596; pepper, 13,504; cardamums, 1007; bastard ditto, 1536; hides, 25,536; horns, 4933; teel seed, 6294; stick lac, 2984; tin, 739; silk, 1079.

On December 8, 1857, Sir Robert Schomburgk arrived at Bangkok as British Consul General for Siam.

The First King of Siam has the enormous number of 22,754 officers of different kinds, who receive fixed salaries, amounting in the aggregate to 373,398 ticals, equal to about £53,342. The officers of the Second King are not quite so numerous, and he pays in salaries about one-fourth of the sum paid by the First King. There are also, besides, scores of Siamese princes, male and female, who receive their fixed salaries from one or the other of the two sovereigns, and the sum must very considerably swell the whole amount paid by the two Kings. These princes and officers, with an army of about 5000 priests, all live in Bangkok and its suburbs.

SICILY. The island of Sicily, which formerly belonged to the King of Naples, now forms part of the dominions of the King of Sardinia, having been conquered and annexed in 1860. This change has already been alluded to under the head NAPLES.

The value of the Imports and Exports of the Island of Sicily has been as follows:—

Year.	Imports.	Exports.	Total Commerce
1852	1.212.143	1,807,928	8.020.065
1853	1,132,788	1,710,220	3,843,003
1854	971,904	1,643,561	2,615,465
1855	1,144,016	1,606,098	2,750,114
1856	1,149,637	2,081,083	3,230,720
1867	971.803	9.192.964	8,164,896

The Imports and Exports were thus distributed, taking the last-quoted year:-

•	Counti	ies.				Imports. \mathcal{L}	Exporta £
United States	-	-	-	•	-	33,252	481,580
Baltic, Belgium, a	ınd Ge	rman	y	-	•	249,617	278,789
France	-	- '	•	-	-	196,079	415,618
Great Britain and	i Color	nies	-	-	-	899,385	874,566
Italian States	-	-	-	-	•	84,006	107,692
Other Countries	•	-	-		-	9,023	84,719
						971 269	9 100 064

The total area of the kingdom of the Two Sicilies, before the inroads on it, was 42,693 square miles. The population in 1856 stood at 9,117,050. The number of vessels that entered at the pcr.s of the Continental States in 1853, was 2712 ships, and 820,088 tons; of which 279 vessels were British. France and Austria rank the highest in the shipping trade. The total imports were £3,210,819 in 1853, and the exports £1,468,709. The entries of vessels at the port of Naples, in 1856, were 1026, of which 208 were British. In the island of Sicily the entries at the port of Palermo, in 1856, were 426 vessels, of which 220 were British. At the port of Messina, in the same year, 3406, of which 177 were British. The value of the imports to the island of Sicily were, in 1857, £971,362, and of the exports from it, £2,192,964.

SILK TRADE. We may form some idea of the magnitude of the silk trade of this country, from the fact that our average import of the raw material, in the eight years ending with 1859, was nearly 10,500,000 pounds, annually, exclusive of more than 3,500,000 pounds of waste silk, and knubs or husks. Of the manufactured product from Europe and India were imported about 1,000,000 pounds weight more. While the quantity of raw silk received has thus doubled in the last twenty years, the sources of supply have also much changed. Italy and Syria now furnish us with very little silk; the supplies from France fluctuate; India and China supply us with large quantities, while imports are now coming forward from Japan, Siam and a tew other new quarters. Raw silk now comes in free of duty.

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The Imports of Raw Silk, in 1859, were from the following countries:-

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China - - - - 3,192,632 lbs.
British India - - - 5,805,487 ...
Other Countries - - 922,772 ...
9,920,691 ...
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The total value of all the silk imported in 1857, raw and manufactured, was £16,689,797, in 1858 only £8,516,752, and in 1859, £13,667,194. The production of raw silk in France appears to double every ten years; in 1855, the quantity obtained was 3,000,000 kilogrammes. The production in Austria is about 7,000,000 pounds.

about 7,000,000 pounds.

SILK MANUFACTURE. There are nearly 500 silk factories in the Unsted Kingdom, in which 5176 horse power is engaged. A capital is embarked of about £50,000,000 sterling, and it gives employment to nearly one million of our population. The export of British silk manufactures is, to some slight extent, increasing, within the last few years, although the home is their principal demand. Our imports of foreign manufactured silks have been rather on the decline of late years.

PROGRESS of the SILE TRADE of the UNITED KINGDOM, from 1845 to 1860.

	1845 Quantities.	1850. Quantities.	1855. Computed Value.	1860. Computed Value.
Imports of European silks, exclusive of lace, millinery and ribbons iba. India silks - pieces Raw silk - Iba. Thrown silk - Iba. British silk manufactures exported,	341,441 782,782 4,354,696 511,832	698,716 766,941 4,942,407 469,527	£ 509,183 \$13,285 4,564,733 906,571	£
including thrown and twist, de- clared value &	766,405	1,255,641	1,524,843	2,351,639

SILVER. See BULLION, COINAGE, &c.

SINGAPORE. Two years after its establishment, the fixed inhabitants of Singapore numbered but 12,000, now they have risen to 80,000, of which about 50,000 are Chinese, and 8,000 or 10,000 arrive every year, who either settle in Singapore or proceed to Malacca. Singapore produces annually and ships about 5000 tons of gambier, better known in England as Terra Japonica, 6000 or 7000 tons of sago and sago flour, and 1250 tons of pepper. Being also the entrepôt of the Eastern Archipelago, all the products of the various islands are received there for shipment to Europe. Some 2000 to 3000 prahus and junks visit the port annually from Bally, Borneo, Celebes, Sumarra, Java and the neighbouring islands, from China, Siam, Arracan, Moulmein, and other parts of the Continent.

The Bugis trade commencing in September and ending in November, is gene-

The Bugis trade commencing in September and ending in November, is generally esteemed by the local merchants as second only to the trade with China. The junks from China are a larger class of vessel and of considerable burthen. Singapore is also largely frequented by square-rigged vessels. About 700,000

tons of shipping annually enter the ports. In 1858 the value of the imports was £6,700,000, and of the exports £5,783,600.

In 1859 the aggregate value of the trade was rather less, being only eleven

millions sterling.

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The great extension of British trade with China, Siam, Java, Borneo, Japan and other Eastern countries has greatly benefited Singapore, which may be looked upon in the light of a large bonded warehouse.

SKINS. See FUE TRADE.

SLAVE TRADE. According to the latest accounts, the number of the slaves in the Southern States of the North American Union was 4,000,000; Brazil, 3,000,000; Cuba and Porto Rico, 705,000; and in the Dutch Colonies about 53,000; namely, 39,000 in Surinam, 10,400 in Curacoa, and other West India islands, and 3,600 in the Eastern possessions.

In March, 1854, the State of Venezuela liberated its slaves, numbering about 16,500. Notwithstanding the Convention between the different European States and the efforts Great Britain has made to suppress the slave trade on the coast of Africa, the illicit traffic is still carried on to a small extent on parts of the eastern and western coasts of Africa, particularly by the Portuguese. In Zanzibar especially, 19,000 or 20,000 slaves are annually imported.

SOAP. In 1853 the excise duty on soap was abolished. The statistics of the previous year show the condition of the manufacture at that period. The number of soap makers was 152 in England, 21 in Scotland, and 143 in Ireland,

making 316 manufacturers in all who paid license duty, amounting to £1337.

The aggregate quantity of soap made was 203,199,830 lbs. of hard soap, and 20,859,870 pounds of soft soap, the total excise duty, on which was £1,424,760. The exports of soap and candles were grouped together in that year and stated at 19,586,747 lbs. The quantity of soap exported in 1848 was 10,462,069 pounds, and on the average of the three years ending with 1859, 175,000 cwts. or 19,600,000 pounds.

Of the shipments of 174,410 cwt. in 1859, 49,329 cwts. went to the West Indies, 20,466 cwts. to British North America, 19,449 to Australia, and the rest to other countries. The allowance of soap to paupers and prisoners is 10 or 11 lbs. per head per annum. Assuming the make now to be about 250,000,000 lbs., this would give an average annual consumption of about 10 pounds per head for the kingdom. The French are extensive manufacturers of soap, and more is shipped from the single port of Marseilles to the markets of the Mediterranean, South America, &c. than the entire British export. Marseilles has some advantages from being nearer to the sources of supply of palm oil, ground nut oil, &c., and had the advantage of a large export trade before the excise restrictions were removed here.

SODA. The alkali obtained from common salt and termed in commerce soda ash, is largely used for soap making, as a substitute for potash in glass making, and for bleaching cotton. In 1850 it was manufactured at 30 chemical works in the United Kingdom, the aggregate quantity made being estimated at 104,260 tons, for making which 156,390 tons of salt were used. The export has been greatly on the increase; while in 1850 only 8000 tons were shipped, in 1859, it was 101,380 tons. Of the purer carbonate of soda 25,000 tons were made in 1850, and the manufacture has largely increased.

SOUND. The dues charged by Denmark for the Sound were abolished in 1857 by an agreement with several of the principal maritime nations concerned in the navigation, who undertook to redeem the dues by a present payment. Great Britain paid £1,125,206 as her share, and Hamburg £12,040. It may be interesting to glance at the shipping trade passing the Sound as indicative of the Baltic commerce. From 1848 to 1854 inclusive there passed the Sound 130,275 ships measuring 12,926,120 lasts; an average of 18,610 ships and 1,846,588 lasts annually. The ship last is about 2 tons. In 1855 the number of

ships passing the Sound was but 15,787, measuring 1,515,611 lasts. This decline arose from the war with Russia. In 1854 the revenue to Denmark from the Sound

and River dues was about £20,000, and in 1860, £130,000.

SOUTH AUSTRALIA. The population of this colony on the 31st December, 1857, was 109,917 souls. The revenue for 1859 was £505,870, and the expenditure £587,744. The imports and exports for the last five years have averaged about The number of vessels that entered Port Adelaide in 1857 was 522, measuring 145,567 tons. The trade of the colony has been greatly improved by the placing of steamers on the river Murray and its tributaries, which bring down the wool and produce of the interior to Port Adelaide for shipment. Agridown the wool and produce of the interior to Port Adelaide for shipment. Agriculture and mining are the principal occupations. The extent of land under cultivation in 1857, was 236,000 acres. The live stock in the colony comprised 26,220 horses, 310,400 cattle, 2,075,805 sheep and 38,199 pigs. Manufactures are largely on the increase. Among the exports in 1857 were 34,438 tons of four, 23,654 qrs. of wheat, 56,929 cwts. of wrought copper and 8036 tons of copper ore, 1,422 tons of lead, and 10,106,000 lbs. of wool.

SOUTH SEA COMPANY. In 1853, Government determined upon commuting or paying off the various South Sea securities and Stock of the Company. The proprietors claimed the payment in money of their Stock at part, and received

The proprietors claimed the payment in money of their Stock at par, and received the sum of £3,662,784. Of the Old South Sea Annuities, £2,040,545 were paid in money, and £739,233 converted; of the New South Sea Annuities, £1,540,676

money, and £739,233 converted; of the New South Sea Annuities, £1,540,676 was paid in money, and £463,607 converted into other Government securities. SPAIN. The population of this kingdom, according to the census revised by the Commissioners in May 1857, was 16,301,851. This included the Balearie and Canary Islands. The revenue has gradually increased from £11,379,264 in 1853 to £18,126,314 in 1857. The number of vessels belonging to Spain on the 1st of January, 1868, was 5175, registering 349,762 tons, 13,397 fishing and river boats of 61,025 tons, and employing in all 72,502 seamen. The entries of vessels in Spanish ports in 1856 were 10,409 ships and 1,068,903 tons, with \$7.953 seamen. Of the vessels that entered with carroes, 1518 of 279,889 trans 87,953 seamen. Of the vessels that entered with cargoes, 1518 of 279,889 tons were from England and 493 of 33,562 tons from British possessions. The value of the imports into Spain in 1857 was £15,554,000, and of the exports 11,686,090. The exports and imports had more than doubled in five years. The exports of British produce and manufactures to Spain averaged £2,100,000 in the three years ending with 1859. There are about 612 miles of railway in operation,

893 completed but not yet working, and 2000 miles conceded or anthorized.

SPIRITS. The number of gallons of British spirit distilled in 1851 was as follows. In England 9,595,368; in Scotland, 6,830,710; in Ireland, 7,550,518:

total 23,976,586.

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The number of gallons of spirits consumed in Scotland in the five years, 1849-53, was 36,039,712 gallons, of which 34,595,363 was British spirits and the rest foreign and colonial. The quantity consumed in the next five years, 1854-53, was 29,079,188 gallons, of which 27,975,788 gallons were British spirits. number of gallons consumed in the corresponding periods in England was, 1849-53, 70,479,207 gallons, of which 48,151,471 were British. In the five years,

53, 70,479,207 gailons, of which 45,151,471 were Drillin. An the live years, 1854-58, 78,597,128 gallons, of which 56,218,482 gallons were British spirits. The number of gallons of proof spirits distilled in 1859 was 7,230,863 gallons in England, 13,190,865 in Scotland, 7,235,993 in Ireland; total 27,657,721. The quantity on which duty was paid in the kingdom was 24,254,403 gallons at 8s a gallon. Amount of duty received £9,701,761. The number of gallons imported into England from Scotland in that year was 4,878,187, and from

Ireland 1.496,313 gallons.

The proof spirits permitted out from distillers' stock for export in 1859, was 1,775,274 gallons, and of British compounds and spirits of wine 375,715 gallons. The methylic alcohol sold by the excise between 1st October, 1855 and 31st December, 1859, was 89,827 gallons, and of methylated spirits sold under license

by authorized parties in the same period 838,517 gallons.

Methylated spirits has lately been much used by dyers to produce some of the bright colours which have been in fashion for ladies' dress. It seems that the French have long been in the habit of using this alcohol in dyeing, but in this country the high duty levied on spirits acted as a complete prohibition against the application of them to such a purpose, and enabled the French to maintain an undoubted superiority.

TOTAL number of PROOF GALLONS of SPIRITS that paid DUTY in 1851 and 1859.

					1861.								1859.	
			Rum.	Brandy, &c.	Britteh Spirite	Total				Ä	Rum.	Brandy,	Brittsh Spirits.	Total
			Gallona	Gallons	Gallone.	Gallons.				8	Gallone.	Gallona	Gallons.	Gallons.
England -	•	•	2,542,395	1,778,550	9,595,368	13,916,318	England -	•	•	3,3	31,975	1,117.694	10,592,049	16,141,790
Scotland -	•	•	179,863	80,301	6,830,710	7,090,894	Scotland -		,	==	56,714	1,894	7,128,906	7,358,614
Ireland -	٠	•	158,147	44,362	7,550,818	7,753,017	Ireland -				96,4:50	61,821	6,538,448	6,686,719
United Kingdom Net duty	• •	• •	2,880,425 1,097,930	1,428,970	22,976,596	28,760,224				86	8,675,679	1,835,997	24, 254, 403	89,187,048

The totals of foreign spirits will not be found to agree with the entries, owing to alight discrepancies in the returns from the divisions of the kingdom; but
are the quantities on which duty was paid for consumption according to the Board of Trade returns.

The following Table shows the number of Inverial Gallons of Spirits of all kinds charged, with Duty for Consumption, since 1851, in the Different Divisions of the Kingdom, distinguishing British from Foreign Spirits.

			I					Ĭ						
					-	ENGLAND.			SCOTLAND.			IRELAND.		_
					British	Foreign.	Colonial.	British.	Foreign.	Colontal	British.	Foreign.	Colonial	
					Gallons.	Gallons.	Gallone	Gallons	Gallons.	Gallone	Gallone	Gallons.	Gallone	_
1881	•	•	•	•	9,595,368	1,778,550	2,542,396	6.830,710	80,301	179,888	7.650.518	44.359	159.147	-
1852	•	•	•	•	9,820,608	1,835,989	2,558,427	7,172,015	83,909	181.638	8.208.256	46,678	164,719	_
1858	•	•	•	•	10,850,307	1,768,049	2,902,002	6,534,648	91,690	166,190	8,136,362	50,490	161,265	-
1854	٠	•		•	10,889,611	1,740,687	2,959,276	6,553,239	107,044	148.536	8,440,734	53.918	118.783	_
1855	•	•	•	•	10,384,100	1,436,996	3,018,469	6,344,319	77,508	114.640	6.328.856	48,618	90.466	_
1856	•	•	•	•	9,343,549	1,42,807	3,177,928	7,175,980	81,646	145,158	6,781,068	55.650	100,320	
1857	٠	•	•		10,199,565	1,301,791	3,158,303	7,000,828	79,980	141.655	6.920.046	53,669	96,680	_
1858	•	•	•	•	10,028,591	1,042,965	3,198,236	6,781,879	65,706	141,727	6.402.143	47.303	87.076	_
1859	•	•	•	,	10,592,049	1,217,694	3,831,976	7,123,906	77,094	156,714	6.638,448	61.831	86.450	_
1860.	to 30	June	,		5.289.740	791.160	1.840.313	3.305.065	91.883	75,075	8.086.994	44.404	45.776	_
											-	- 22.61		

The following have been the successive alterations in the rates of duties on British made spirits. 1853, April 21. The duty on spirits in Scotland was increased from 3s 8d to 4s 8d per gallon. In Ireland, from 2s 8d to 3s 4d per gallon, countervailing duties on medicated spirits, sweets or made wines, altered accordingly. Spirits from the Channel Islands, imported into Scotland increased from 4s 10d to 5s 10d; into Ireland, from 3s 10s to 4s 6d. The duty on spirits in Scotland was increased 1s per gallon from May 8, 1854, and a further increase of 4d from May 26th. Spirits in Ireland increased 8d per gallon from May 8th. The duty on spirits in Scotland was increased 1s 10d per gallon from May 8th. 1855, and further increased 2d per gallon from October 1, 1855. In Ireland increased 2d per gallon, and further increased 2d per gallon on the same dates. The duty on spirits in England was increased 2d per gallon from October 1, 1855.

A license duty of £10. 10s to makers of methylated spirits was imposed October 1, 1855. This methylated spirit is spirits of wine rendered non-potable by the admixture of wood naphtha, and which is then permitted to be used duty

free in the arts and manufactures.

The duty on spirits made in Ireland was increased 1s 10d per gallon, from April 19, 1858, and from 29th February, 1860, the duty on British spirits generally in the United Kingdom was increased 1d per gallon. The increase in the gross duties received on home made spirits have been upwards of £4,000,000 in the last ten years.

				1850.	1859.
England	-	-	-	£2,976,674	4,340,197
Scotland	-	-	-	1,864,261	2,972,642
Ireland	-	-	-	1,103,947	2,667,352
United K	nedo	m -	-	£5,944,183	10,000,191

The number of licenses issued in 1851, was as follows:-

1851.			England.	Scotland.	Ireland.	Total
Distillers Rectifiers Wholesale Spirit Dealers Retail Spirit Dealers	:	:	12 74 1,551 57,564	160 6 44 14,662	59 38 109 14,657	222 118 1,704 86,863
Total	•	-	59,201	14,873	14,854	88,927

The gross amount paid for these licenses to the Commissioners of Inland Revenue was £554.039.

In 1859 the numbers stood as follows:-

1859.			England.	Scotland.	Ireland.	Total.	
Distillers Rectifiers Wholesale Dealers Retail Dealers		<u>-</u>		16 104 1,568 62,487	125 9 70 11,938	85 45 133 17,168	176 158 1,771 91,543
Total		-	-	64,195	12,142	17,881	98,648

The gross amount paid for these licenses was £571,684.

SPONGE. The number of boats employed in the sponge fishery in the Ottoman Archipelago is now about 600, employing 4200 men. Of these boats, 70 fish on the coasts of Rhodes, 150 on those of Candia, 180 off the Syrian coast, and 200 about the Barbary shores. In 1857, the quantity of sponge exported from the port of Rhodes was 294 cwts. of fine, valued at £51,282; 1195 cwt. of common, worth £24,974; and about 400 cwts. of coarse, worth very little. The imports of sponge in the United Kingdom in the four years 1855-58 averaged 315,000 lbs. valued at about £160,000.

STAMPS. The following is a chronological account of the alterations made in the rates of duties on stamps, &c. in the last ten years:—

1850.—Stamps on Agreements, Bonda, Con-veyances, Leases, Mortgages, Settle-ments, Warrants ot Attorney, and a few other legal instruments, reduced from Oct. 10, 1850.

Discount on Receipt Stamps increased from £1. to to £7 10s per cent. from Jct.

8.—Articles of Clerkship to Attorneys, &c. reduced from £120, to £80, from August 4, 1853.

Attorneys', Conveyancers,' &c.

Attorneys', Conveyancers,' &c. Certificates, reduced trom £12 to £9., and from £8 to £6., from August 4, 1853.

Apprenticeship and Clerkship Indentures, without a premium, reduced from £1. 15s to 2s 6d, from Oct. 10, 1853.

Debentures or Certificates for receipt of drawback altered from 5s ta various rates from Oct. 10, 1852.

Life Assurance Policies reduced various rates from Oct. 10, 1853.

Americal Policies remove various rates from Oct. 10, 1853.

Receipt Stamps - Duty reduced from Various rates to 1d from Oct 10, 1853.

Supplements to Newspapers - Duty partially repealed from August 4, 1853.

Advertisement Duty repealed from August 4, 1853.

August 4, 1853. Drafts or Orders for Money on Demand

-- Duty of 1d imposed from Oct. 10, 1853.

-- Scrip Certificates -- Stamp Duty of id imposed from August 4, 1853.

-- Succession Tax--Legacy Duty on succession to real property imposed at various rates from May 19, 1853.

1854. -- Stamps-- Inlaud Bills of Exchange and Promissory Notes-- Duties reduced from Oct. 10, 1854.

-- Foreign Bills of Exchange -- New Duties imposed at various rates from same date.

-- Pawnbrokers' Licences in Dublin reduced from 213. to 27. 10s from Oct. 10, 1854.

1835.—Newspaper Stamps—Duty repealed, except for transmission by Post, from June 30, 1855. Admiralty Stamps, imposed August 7,

1854.—Probate Court Stamps, and Divorce and Matrimonial Causes Stamps, imposed from Jan. 11, 1858.

1858.—Draft or Order for Money Grawn on a Banker (hitherto exempt) Stamp Duty of 1d imposed from May 24, 1858. 1859.—Probates of Wills and Letters of Ad-

ministration—graduated stamp duty, ex-tended per Act 23 and 23 Vict., c. 63.

The revenue received from Stamps by the Inland Revenue Commissioners has not fluctuated to any large amount, having been £7,710,683 in 1845, and £7,752,592 in 1859.

The manufacture of starch is now a very important trade both STARCH. in this and other countries. In the United States Indian corn and potatoes are largely used for the manufacture. In the United Kingdom, wheat, rice, potatoes. and other suitable vegetable substances are employed.

Ten years ago the manufacture of starch of all kinds was estimated at upwards of 20,000 tons, of the value of about half a million, besides what was imported. But since that period the progress of our textile manufactures has led to a greatly increased consumption. About 5000 tons a year of what are termed "come substitutes" are now made from what and received. gum substitutes" are now made from wheat and potatoes. One single printworks in Manchester uses about a ton a day of this starch. The imported

words in manchester uses soont a ton a tay of this statch. The imported starches, arrow-root, cassava, sago, &c. reach also to a considerable amount. ST. DOMINGO. The number of vessels that entered at the port of St. Domingo in 1856 was 108, of 12,000 tons, with cargoes valued at £99,000; of these, 15 vessels were British. The number of vessels that entered at the port of Puerto Plata in 1857 was 138 of 12,413 tons, with cargoes of the value of £188,023. The export cargoes in the same year were to the value of £266,600. The value of the Imports were :-

1857 £94,958 132,974 At St. Domingo 188,094

The principal shipments from the port of St. Domingo in 1856 were 2,236,180 feet of mahogany, 2016 tons of lignum vitae, 484 tons of fustic, 58,715 lbs. of wax, and 314,134 lbs. of hides. From Puerto Plata in 1857, 1,046,635 feet of malogany, 51,827 serons (of 100 lbs.) of tobacco, 41,533 lbs. of wax, 17,225 lbs. of hides, and 174 tons of dye woods.

STEAM ENGINES. The employment of steam power has become so

general throughout the kingdom, that the number of steam engines employed in factories, on farms, and on railways, must be very considerable. In agriculture there are now about 30,000 employed; the locomotives must number fully 5000. Ten years ago there were estimated to be 16,000 stationary engines in the kingdom, working mines, iron works, and rolling mills, factories, flour mills, and various other manufactures, assumed to be worth £25,000. The motive and various other manufactures, assumed to be worth £25,000. power in the various textile manufactories of the kingdom was returned in 1856 at 137,711 horse power.

STEAM NAVIGATION. The progress of steam navigation of late years has been very rapid. Great Britain and the United States have the largest number, but many European States have also added considerably to their mercantile steam fleet. The number of steam vessels owned by the United Kingdom and her Colonies in 1840, was 824 of 95,807 tons. In 1850, it was 1350 of 187,631 tons, and in 1859 it had increased to 1854 vessels, of 682,433 tons, and 187,274 horse power, inclusive of those owned by the Colonies. For zerea or eight years past about 200 steamers a year have been built and registered in the United Kingdom, besides many built for foreigners.

The steam tonnage of the United Kingdom has within the last five years increased in a much greater proportion than that of sailing vessels, and in a much greater ratio than that of any other nation. While at the close of 1855 it amounted to 288,956 tons, it increased in 1859 to 398,515 tons, being about 35 per cent. more. There is apparently a tendency to substitute the rapid and comparatively certain power of steam for the more uncertain power of wind, and this tendency will become stronger should the various experiments for economizing fuel prove to be as successful as they are expected.

In 1850 the number of British steamers employed in the Trade of the United Kingdom was as follows:—

Home Trade Partly Home and partly Foreign Foreign	Vessela.	Tonnage.	Men Employed.
	320	54,196	4491
	20	5,298	296
	86	45,186	2813
Tatal	426	104.680	8780

In 1859 the number had increased in a remarkable degree.

Home Trade Home and partly Foreign Trade	Foreign-going	Vessels. 374 59 462	Tona. 90,867 21,123 277,527	Men. 6377 1302 18,719
•	Total	895	299 517	96 999

This was exclusive of river steamers.

The registered steamers in the United Kingdom, exclusive of the Colonial ones, were in

	18	146.	1857.			
Below 50 tons Above 50 tons	 Versels, 410 553	Tonnage. 10,204 121,052	Vessels. 677 1147	Tonnage. 16,002 401,464		
	963	131,256	1824	417,466		

In 1850 there were 1181 steam vessels of 167,398 net tonnage belonging to the United Kingdom, in 1858 there were 1916 vessels, registering 451,047 tons, exclusive of engine room.

The Statistics of British owned Steam Vessels in 1858, were as follows:-

				V ceseis.	Tons.
England:	Above 50 tons		-	821	316,241
Of	and under 50 tons	-	-	626	14,334
Scotland:	Above 50 tons	-	-	244	83,280
	Below 50 tons	-	_	70	1566
Ireland:	Above 50 tons	-	-	125	34,757
	Below 50 tons	-	•	30	869
Channel Islan	ids: Above 50 tons	-	-	9	1405
	Below 50 tons	-	-	1	16
Colonies:	Above 50 tons	-	-	186	21,087
	Below 50 tons	-	-	94	2974
				9000	409 590

From another statement we make the gross registered steam tonnage, exclusive of the Colonies 682,433 tons, and the effective horse power 187,274.

The increase of steam shipping in our coasting and foreign trade in the eight years from 1850 to 1858 rose from 104,680 tons to 369,204, or about 250 per cent. When we find upwards of eighteen million tons of steam shipping employed yearly in our trade, the inference is plain, that these must supersede, to a great extent, the slower sailing craft.

The descriptions of vessels registered were as follows at two periods.

				1855.	1859.
Iron Paddle Vesrels	-	-		275	433
Iron Screw Vessels		-	-	264	566
Wooden Paddle Vessels	-	•	-	931	820
Wooden Screw Vessels	-	-	-	10	85
Wood and Iron Paddle di	tto	-	-	1	•••
				1480	1854

There are two prominent points noticeable in these figures, the great increase of iron-built steam vessels, and the manifest preponderance which screw steamers are taking over paddle steamers.

In 1837 there were but 26 steam vessels in the British Royal Navy, of 4536 horse power, in 1857 this number had increased to 459, of 102,084 horse power, and three-fourths of the men-of-war kept in commission now consist of steamers. The steam war navies of the two principal countries, according to an official British report, dated 6 July, 1859, were respectively, England 468, of which 30 were building: France 264, of which 35 were building:

which 30 were building; France 264, of which 35 were building.

In 1858 France owned 330 mercantile steam vessels of 72,070 tons, so that we have six times the number of vessels and amount of steam tonnage of the French, even without reckoning the steam vessels owned in India and the Colonies.

STONE TRADE. Mr. Robert Hunt, in his Mining Records of the United Kingdom, estimates the entire production of building and other stones, and the aggregate value of the quantity raised in each part of the kingdom, as follows. His estimate is framed upon returns received from 2400 quarries in 1858.

				Tons.	Value. £
England	-	-	_	7,500,000	1,705,508
Wales	-	_		8,500,000	898,123
Scotland	· -	•	-	4,750,000	1,211,398
Ireland	-		-	•••	800,000
Jersey	-	-	-	14,200	7,900
				15 664 900	A 699 094

From Padstow there was shipped of Cornish stone, in 1858, 1900 tons of granite. The Cheeswring granite quarries produce annually about 14,000 tons, and the Par granite quarries 8000 tons, the Penryn quarries 20,000 tons, and the Penzance quarries 4000 tons; at the Breakwater quarries in the Plymouth district, about 100,000 tons of limestone are annually quarried.

The principal Portland quarries produce 40,000 tons of stone annually, the price of which is about £1 per ton on the wharf. The quarries of the Bath Colitic district yield about 158,000 tons annually, much of which is sent to distant markets in large blocks. The Great Western Railway carries upwards of 62,000 tons of it.

STRAW PLAIT. The straw plait trade has been greatly extended of late years, and the annual returns are estimated to be to the value of about one million and a quarter sterling. It gives employment directly and indirectly to 80,000 or 100,000 persons, nearly all females. Luton is the chief centre of the trade, but between 190 and 200 towns, villages, and hamlets in the district are interested in the trade and manufacture. There is a considerable export and import trade in straw plait, hats, &c. The computed value of the imports of both in 1858 was £250,000. The average value of the exports of plait in the

five years ending with 1858 was £59,653, of which £43,500 was of British manufacture. The straw plait trade is also of great importance in several of the States of Europe—France, Belgium and Switzerland carry on an extensive business, chiefly for local consumption. In the Black Forcet straw plaining comprises a large number of persons. In Itself the annual value of the property of the property of the persons occupies a large number of persons. In Italy the annual value of the production is over one million sterling.

SUGAR. The consumption of sugar in the world may be roughly estimated at two and a half million tons, of which the United Kingdom uses 462,500 tons, the rest of Europe about as much, and the United States nearly 400,000 tous. The production of tropical or cane sugar is perhaps only about one million and a half of tons, but maple sugar, date sugar (100,000 tons), beetroot sugar, and potato sugar make up the deficiencies.

The Imports of Sugar into the United Kingdom in 1859 were drawn from the following sources, and the quantity taken for consumption is added.

		Imports.	Taken for Consumption.
	F	Cwts.	Cwts.
British West Indies and Guiana	- 1	3,126,530	8,139,147
British East Indies	-	877.971	877,504
Mauritius	- 1	1,130 386	1,136,109
Cuba and Porto Rico -	- 1	1,793,756	1,831,145
Brazil	-	1,112,429	962,798
Java and Philippines -	-	476.091	404,748
Other Countries	-	293,064	381,830
Total	-[8,910,217	8,733,271

Besides the above quantity 188,703 cwts. of sugar equal to white clayed, and 262,461 cwts. of refined sugar and candy were imported, making in all 9,361,341 cwts. of sugar received. Thus in the last twenty years the imports and consumption have more than doubled in the kingdom, and the price has materially declined.

The following estimates will give an idea of the progressive increase in the production of Cane Sugar, in tons, in the principal countries:-

			1850,	•		1860.
Brazils -	-	-	103 000	-	-	100,000
United States	-	-	11,000	-	_	110,000
Cuba -	-	-	250,000	-	-	300,000
Porto Rico	-	-	48,200	-	-	50,000
French West Inc	dies	-	47,250	-	-	65,000
Danish ditto	-	-	8,000	•	-	7,500
Dutch ditto	-	-	14,200	-	-	15,000
British ditto	-	-	129,200	-	-	160,000
East Indies	-	~	67,300	•	-	148,000
Mauritius	-	-	57,879	-	-	175,000
Java -	-	-	82 000	-	-	100,000
Manilla		_	90 000	_	_	95,000

The application of the principle of free-trade to this article has not been less successful than its application to the silk manufacture and the repeal of the duties on corn. Successive reductions were made in 1845, 1846, and 1848, in the discriminative duties on foreign, East India, and colonial sugars; the Act of 1848 provided for the gradual reduction of duties until July 1854, from which period the duties on sugars from all countries were to be equalized, and to vary from 13s 4d on refined sugar, to 10s on brown raw; on molasses the duty was fixed at 3s 9d. In consequence of the war with Russia in 1854, the intended commencement in that year of the equalized scale of duties was suspended.

Official returns attest the favourable results from the reduction of the duties

on sugar, the home consumption having increased from an average of 15½ lbs. to 37 lbs. for each individual in the United Kingdom, and this greatly increased consumption has brought up the revenue to more than it was before the lowering of the duties.

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Additional duties on sugar to continue during the war were imposed in 1854. By 17 Vict. c. 29, the following duties were made payable from August 2, 1854:

				s. a	
Candy, brown or white refined sugar	-	-	per cwt.	16	0
White clayed	-	-	ditto	14	0
Yellow Muscovado, and brown clayed	-	-	ditto	12	0
Brown Muscovado	-	-	ditto	11	9
Molasses	-	-	ditto	4	8

The Excise Duties on Sugar made in the United Kingdom are the same as the Customs Duties.

On the 21st April, 1955, a further increase in the duties was made :-

				<i>a. a.</i> a.
White clayed being charged	-	•	-	0 17 6
Not equal to white clayed	-	-	-	0 15 0
Not equal to brown clayed	•		-	0 13 9
Refined and sugar candy	-	-	-	100
Molasses	-	-	-	054

On the 5th April, 1857, a reduction was made to the following rates, which are those still in force:—

Equal to white clayed -	-	-	•	0 16 0
Not equal to ditto -	•	-	-	0 13 10
Not equal to brown clayed	-	-	_	0 12 8
Refined and Sugar Candy	•	-	-	0 18 4
Molasses	-	-	-	050

The annexed table (in continuation of that given at p. 639) shows the total imports since 1842, the quantity of different kinds retained for home consumption, the produce of the duty thereon, and the average price of British plantation sugar, in bond, as taken from the London Gazette.

		Entered for Consumption in the United Kingdom.			Produce of Duty	Price of	
Years ended	Total Imports.	British Plantation and Mauritius.	British East India.	Foreign.	Total	on Sugar and Molasses.	British Plantation per Cwt.
5th July	Cwta	Cwts	Cwts	Cwts.	Cwta	£	4.4
1842	4,462,491	3,139,240	1.021.071	295	4,160,606	5,495,018	87 0
1843	4,970,056	2,922,200	1,017,200	61	3,940,461	5,178,196	84 7
1844	4,617,445	3,017,099	932,164	85	3,949,348	5,254,006	84 9
1845	5,704,765	3,418,254	1,233,716	84,557	4,686,527	4,995,998	31 8
1846	6,106,242	3,482,214	1,286,870	60,086	4.828,620	3,584,689	35 3
1847	6,633,208	3,120,127	1,422,876	1.207.949	5,750,952	4,663,562	82 11
1848	7,202,269	8,703,264	1,141,990	780,733	5,625,987	4,399,666	24 8
1849	6,924,445	3,711,214	1,317,025	928,956	5,957,195	4, 423, 934	24 4
1850	7,186,667	4.041,111	1,321,970	624,664	5,987,745	4,071,945	25 8
1851	6,897,656	3,495,107	1,360,367	1,208,883	6,064,357	4,137,518	27 8
1852	7,650,048	3,409,222	1,488,955	1,145,757	7,038,934	4,353,608	22 7
1653	6,741,986	4,795,828	1,529,000	744,182	7,068,960	4,081,270	24 2
1854	7,494,566	4,702,600	1,804,196	1,476,620	7,483,356	4,420,978	24 1
30th June							
1855	8,233,696	4,084,954	754,806	8,856,120	8,145,180	5,330,067	20 11
1856	7,776,129	4,596,007	653,221	1,892,507	7,141,785	5,686,067	28 8
1857	7,973,466	3,956,210	1,287,637	2,848,404	7,592,251	5,780,635	86 8
1858	8,704,784	4,260,648	700,257	2,967,561	7,928,466	5,678,964	80 7
1859	9,187,936	4,728,609	920,717	3,509,686	9,159,012	6,465,080	27 7

Best Root Sugar. The duty on beet root sugar having been assimilated to that on colonial in France in 1845, has checked the indigenous manufacture, which had been very rapid. In 1849, 303 factories there produced 61,826,626 kilogrammes, or 69,000 tons. In the close of 1857 the number of establishments at work was 282, which manufactured 53,979,866 kilogrammes. The cultivation of the beet root for sugar would at length seem to have reached a culminating point, and it is now being abandoned in many quarters as unremunerative for this purpose. In Germany the manufacture is principally carried on in the

neighbourhoods of Magdeburg, Halforstadt, and Breslan, in Prus Duchies of Brunswick, the Anhalts, and Baden. In 1859 the number of sugar factories in the Zollverein was 257; of these, the greater proportion (214) were in Prussia, about a dozen in Brunswick, 7 or 8 in Bavaria, and 6 in Wurtem-

burg.

While the consumption of sugar generally in the States of the Zollverein in 1840 was under 5 lbs. per head of the population, in 1855 it had reached the rate of 61 lbs. per head. In 1842 the consumption of sugar in the Zollverein 1847 was under 2012 and 2012 and 1848 per cent heet sugar: in 1857 was at the rate of 81.64 per cent. colonial, and 18.36 per cent. beet sugar; in 1857 it was 84.33 per cent. of beet root sugar, against only 15.67 per cent. of colonial produce. The yearly quantities consumed from 1844 to 1846 were 1,278,421 cwts. of colonial sugar, and 264,283 cwts. of beet sugar. The quantities consumed from 1853 to 1855 were 654,386 ewts. of colonial, and 1,487,452 ewts. of beet sugar. The price of sugar had also fallen in ten years about 3s per cwt. In 1848 about 100,000 tons of beet root sugar was made in Europe; in 1860 it exceeded 420,000 tons, of which 200,000 was made in Germany, 100,000 tons in France, and the remainder in Belgium, Bussia and Poland, &c.

Maple Sugar. The quantity of this sugar made in the United States and in Canada may be fairly considered as amounting to 30,000 tons annually, besides

Canada may be muly consumers about 50 million gallons of molasses.

SULPHUR. The average import of sulphur in the three years ending 1859

The manufacture of sulphuric acid has enormously increased, and likewise been greatly reduced in price. In 1850 the quantity made in the kingdom was estimated at 300,000 tons, worth at least £1,200,000. France and the United States probably consume as much. SUMACH. The consumption of this dye stuff and tanning substance has in-

creased to about 15,000 tons per annum. SWEDEN. The population of Sweden in the close of 1855 was 3,639,332; Stockholm had risen in 1859 to 101,502 inhabitants, and Gottenburg to 30,576. The revenue of Stockholm in 1860 was about £1,500,000, and the expenditure rather exceeded it. The entries of vessels in 1857 were 6474 ships, of 244,837 lasts, with cargoes, and 3563 ships, of 216,145 lasts in ballast. The clearances were 8123 ships and 419,273 lasts loaded, and 1764 ships and 82,202 lasts in ballast. The mercantile marine of Sweden at the close of 1857 numbered 3190 ships, measuring 147,705 lasts. The exports of Sweden consist exclusively of the raw products of the country, the principal of which are iron and timber. The improvements in agriculture during the last few years enable the southern and western provinces to export annually a fair amount of corn, and the shipment of oats to England is considerable.

The exports from Great Britain to Sweden in the three years ending 1859 averaged in value £500,000 per annum. The value of the general import trade of Sweden is now about £5,000,000, and that of the exports £4,500,000. The public debt of the State is under £4,000,000, and has been incurred chiefly for the construction of railways, of which there are about 150 miles now in operation. In 1853, 30,100 tons of iron and steel were shipped from Sweden, and

257,850 dozen of deals, battens and boards. SWITZERLAND. The population in 1850 was 2,392,740. A large quantity of goods is conveyed in transit through Switzerland, and this has been gradually increasing of late years, especially wood, spirits, cheese, butter, sugar, coffee, iron and steel wares, wadding and cotton and yarn, wool and woollen yarn, waste silk, wooden wares, and small wares. In 1855 there were 2270 miles of telegraph wire in operation in Switzerland. The revenue of the Republic in 1860 was £638,640, and the expenditure about £10,000 beyond this. The debt at the end of 1860 was about £400,000. The amount of customs' duties re-The debt ceived in 1855 was £229,045, but the cost of collection was more than half this sum, viz. £131,730. The total area was 9,853,724 acres, of which 3,062,293 was waste or uncultivated. The live stock in 1854 comprised 100,000 horses, 875,000 cattle, 405,000 sheep, 376,000 goats, 279,000 swine; 491,071 cwts. of butter, and 245,585 cwts. of cheese were made in the year.

TAHITI. This island, better known as Otaheite, is the principal French colony in the Pacific, and the largest of the Society Islands. In 1842 it was placed under the protectorate of France, and in the following year it was formally taken possession of by the French Admiral Du Petit Thouars. The value of the imports in 1856 was £120,000, and of the exports £60,000, making

285

an aggregate trade of £180,000.

The number of vessels, exclusive of coasters, that entered at the port of Papeeti in 1858 was 110, of 10,511 tons, of which 8 were British. The total shipping comprised 135 merchant and coasting vessels, measuring 11,494 tons, and 19 whalers, of 6972 tons. The total value of the foreign imports was £83,862. There had been, however, a considerable decrease in the trade as compared with previous years. The value of the exports was £37,112. The domestic produce formed about half this, and consisted chiefly of oranges, lime juice, arrow root, cocoa nut oil, and mother of pearl shells.

TAR. The average imports of tar in the three years ending 1859 were about 13,500 lasts.

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TARIFFS. Great alterations and concessions for the extension of commerce have been made of late years by the principal European and American States in their tariffs. The following embrace the principal alterations.

TARIFFS OF FOREIGN COUNTRIES.—RATES of DUTY upon the principal Articles of British and Colonial Produce and Manufactures levied in each of the Years 1846 and 1853, by the TARIFFS of FOREIGN COUNTRIES.

RUSSIA.

Articles.	Rate of Duty.
arucios.	1846. 1853.
", dyed Turkish red, and the same twisted with white or coloured threads or half cotton wicks, with flax or hemp; also pure flaxen wicks - twist, nettle threads and prepared	cwt.
Cotton Manufactures: All kinds of unbleached, white, plain, and with white ornaments, woven, &c., not otherwise described, having as much as 8,711 square inches or 611 square yards to the lb. avoirdupois The same kinds, but of variegated colours, and with coloured patterns, as much as 612 square yards to the lb. avoirdupois Corduroys, velveretts, and cotton velve-	
teens, coloured; also closely woven stuff, stamped white, of one colour and variegated Printed stuff All kinds with patterns in straw, gold or allver, or tinsel, woven, &c. with or without work; also cut out for dresses Handkerchiefs and shawls of cotton alone, of variegated colours, or initation of Turkish and Cashmeres; also	79 0 9 42 from 0 3 8 8 10 0 9 3 8 1 7 0 0 11 1
borders and esgings, &c. Stockings, nightcaps, gloves, &c., plain or coloured Galloons, cords, fringes, &c., plain or	" 1 15 5½ 0 9 3 " (from 0 8 76) 0 8 8

Russia-continued.	Rate o	f Duty.
Articles.	1846.	1853.
Linen Manufactures: Batiste cambric and lenos (coarse and unbleached), white plain; also white	e e d	e e e
cambric bandkerchiefs, with borders bemmed or not per lb. Fine shirt linen, mixed or not with cotton, plain or coloured; also pocket-hand- kerchiefs with borders. (By Sea.) -	1 5 10} [from 0 7 10] to 1 14 6	• 1 ដ្រ } • 3 ដ្ឋ
kerchiefs with borders. (By Sea.) - J Coarse and thick linen, mixed with cot- ton or not, plain or coloured. (By Sea.) ,, Table-clotha, napkins and towels of linen,	Prohibited	0 2 24
mixed or not with cotton plain or coloured, hemmed or not. (By Sea.) ,, All printed linen and printed linen hand- kerchiefs. (By Sea) - ,,	0 8 7½ Prohibited	0 4 8 <u>1</u> 0 5 24
Stockings, gloves and nightcaps, &c ,, Galloons, tapes, fringes, &c., plain or coloured - , , Fishing nets - , per cwt.	0 6 9 Prohibited 0 6 0	0 3 8 0 3 8 2 11 5
Wool and Woollen Manufactures: Wool, sheep's, raw and scoured; also cloth clippings or shearings, white and		2 11 34
dyed Woollen Yarn: White and dyed for cloth and carpet fabrics; also for sewing, knitting,	1 0 0	0 2 1
embroidery, &c. Spun, combed, for merine shawls and other stuffs of this kind, dyed and not dyed; worsted, twisted or not	8 12 6	6 4 54
dyed; also mixed with silk or cotton. (By Sea) Woollen Manufactures: Clotha, half-clotha, cashmere; also hand-	4 6 0	2 L EQ
kerchiefs and covertids, black, black- blue, greens, darker than grass-green; also white, pale, and blush - per lb. The same cloths and articles of other	0 10 6	0 s tį
colours, except handkerchiefs, coverlids, and counterpanes Flannel, plush or shag, velveteen, and such like articles; feits; also blankets,	0 6 9	0 5 112
white and with coloured borders, or with interwoven patterns - " Diagonal, trico, casimere, and other similar materials for trousers, of one	0 4 6	0 3 9
colour or variegated, woven, mixed, or not with cotton, flax or hemp Carpets or rugs of one or many colours; also worked or embroidered of different	0 10 6	0 5 114
pleces, and with figures sewn on All close woven articles from combed wool, white or of one colour, woven or interwoven, mixed or not with cotton, as camlets, moreons, cassinettes, &c., having as much as \$1\frac{1}{2}\$ square yards to	0 4 81	0 1 10 <u>1</u>
The same manufactures of all denomina- tions, printed or embroidered, having	090	0.46
as much as \$\frac{3}{2}\$ square yards to the English lb. All light manufactures made of combed wool, mixed or not with cotton, white or of one colour, and with patterns woven, &c. viz. merino, half merino, mouseline-de-laine, &c. (except banting), having more than \$\frac{3}{12}\$ square yards to the English lb.	Prohibited	6 s
Stockings, nightcaps, under-vests, jackets,	0 18 13	0 6 8
and gloves, plain or coloured - ,,	0 5 10	0 3 8

Russia—continued,	Rate of D	outy.
Articles.	1846.	1853.
Linen Manufactures—continued. Handkerchiefs and shawis, woollen and with coloured patterns, woven or in- terwoven, in imitation of Turkish and	£ s. d.	£ s. d.
woven or sewn on, and borders and stuffs of this kind - per lb. Silk Manufactures: Non-transparent.	1 15 5}	1 9 73
Bilk stuffs, plain or coloured, figured or flowered, and with patterns woven, &c. also handkerchiefs, scarfs, ribands, &c. The same stuffs, handkerchiefs, scarfs,	{from 0 18 9 to 1 18 8 }	0 18 64
ribanda, &c. with patterns of gold, allver, &c. White, or of one colour, with coloured patterns, woven, &c. also of the same materials, handkerchiefs, scarfs, ri-	2 6 101	179]
bands, chenille and articles thereof, with or without fringes Similar articles, with gold, silver, &c.	4 4 43	1 17 04
woven, &c. Handkerchiefs and shawls of silk, and mixed with coloured patterns, woven, &c., in imitation of Turkish and Cash- meres; also with the borders alone, woven, &c.	4 13 9	2 6 81
Linen Yarn of all kinds per cwt.	from 2 8 0 } to 3 12 0	1 9 74
Metals: Stoel, all kinds, raw - Copper or brass articles of all kinds (except military stores and accountements),	0 19 6	0 7 9
vessels and latten articles of all kinds " Lead, manufactured - " Iron and steel wire and springs - " Sheet Iron, manufactured articles of,	8 9 0 0 8 0 8 0 0	2 11 101 0 0 6 0 18 8
tinned or not, all kinds Tin, in sheets Tin, varnished Tin articles of all kinds not pointed	1 16 0 2 5 0 8 0 6 4 2 114	0 15 64 1 0 9 1 11 14 2 1 54
Tin articles of all kinds, painted with pictures, gliding, and other ornaments "Bewing Needles - per lb. Packing Needles, harness, saddlers and	{from 8 0 0 } to 12 0 0 0 18 6	2 1 54 6 4 54 0 5 64
sailmakers' needles Swords, sabre and dagger blades, with or	0 8 6	0 1 5
without gold and silver Cutlery, and Hardwares. Knives, &c., with handles of wood, horn, &c. also, scissors, suffers, &c. with knife blades, pollshed or not (excepting surgical in-	Prohibited	0 7 5
struments) The same, with handles of ivory, mother of pearl, &c.	0 4 6	0 2 72
Saws, files, &c per cwt. Smiths' work, forged, without filing or	0 15 4	0 10 44
polishing, as anchors, nails - ,, Whitesmiths' and locksmiths' work, not polished, as locks, hinges, screws, &c. per lb.	1 16 21 0 4 6	0 10 44
polished, as locks, hinges, screws, &c. per lb. The same articles, polished, and with brass facings, also steel pens Firearms, and parts thereof Glass and Crystal: " Glass and Crystal:	0 4 6 1 1 9	0 1 101 0 4 54
Window Glass, glass ware, plain and cast, or stamped, but not cut - per cwt. Glass, manufactured, coloured or painted;	9 8 44	1 11 14
also crystal ware, cut, with gilding,	{from 15 11 8 to 49 16 0 }	10 7 5

Russia—continued.	Rate of Duty.			
Articles.	1846.	1853,		
Glass and Crystal—continued. Mirrors cach	£ a. d. Prohibited	from 0 0 44		
Earthenware and Porcelain: Plain, and of one colour; also smoking pipes of clay, &c. (By Sea) The same, with gliding, silver, &c " China, or porcelain ware, of all kinds - " Leather Manufactures:	i 4 0 3 2 3 Prohibited	1 0 9 2 1 Sq 4 13 4		
Boots and shoes of all kinds (except ladies' made ef silk) per lb. Ladies' ditto ditto, of silk - " Gloves of all kinds, and chamois leather"	Prohibited Prohibited	0 3 5ł 0 7 5		
articles Harness, and saddles of all kinds Porter, in bottles Spirits; Rum and Arrack - per 97 gails	Prohibited 0 4 6 0 1 8 5 7 6	0 11 11 0 1 54 0 1 2 8 1 8		

Russia (19th June, 1859.)—Except Poland and Ports of Sea of Azoff. (Import Duties.)

	Articles		Ne	w E	uty.	Ož	d Duty.
Iron ;	Cast, raw	36 lbs. avd.	£	ő	<i>d</i> . 1-90	20	e d. 0 570
	upwards Rail and scrap, By the White Sea Baltic and Black Seas By land	<u>-</u> { "	0	1	1-80	•	1 32
"	Bar of less than 4 inch: By the Black Sea - By land -	- "	0	1	18		2 26 1 7
"	Assorted By the Black Sea By land	- "	_	-	5·10 	4	2 26
"	Boiler, Plate, Sheet, and Still	- "	10	3	2-6	0	2 10-20

SWEDEN.

	Articles.		Rate o	Duty.
	Ar across		1846.	1853.
Cocoa Iron - Anchors Bar Hoops Scissors Steel - Cast All other k Woollen Manufac	inds (except shear	- per lb per 800 lbs " - per lb per 75 lbs.	£ a. d. 0 0 2 0 10 0 0 5 0 0 8 4 0 5 10 0 3 4 Prohibited	£ a. d. 0 0 1½ 0 8 4 Prohibited Prohibited 0 2 8 0 2 24 0 5 0
Half wool, or we	cept fiannel - cought by a Swedi	per 9-10 lb.	0 0 10 { 25 per cent. ad valorem	Less than 7 quarters 12.34 wide - more 12.84 10 per cent. ad valorem
Ropes, new Canvas, linen cloth Fish, salted codfis	ign, bought by Sweet or hemp, sail and the h, per barrel (near ngs ditto	- per 18# lbs. tent - per 9-10 lb.	0 0 10 0 0 11 0 4 2 0 0 3-3-10	0 0 64 0 0 1 0 3 9 0 1 04

Norway.

A44.3	Rate of	Duty.
Articles.	1846.	1858.
Cotton Manufactures, unbleached cloth per 1½ lb. Linen Yarn, untwisted, undyed - " Salicioth - " Woollen Manufactures - per 5 cwt. Machinery for agricultural and industrial purposes Coals - per cwt.	£ s. d. 0 0 9 0 0 8 0 0 1 0 0 1 0 5 0 Free 0 0 1	\$ s. d. 0 0 7 0 0 24 0 0 08 0 0 7 0 7 1 Same as the raw material 0 0 05

DENMARK.

Cotton Yarn, twisted -	- per 1 1 lb.	from 0 0 41 to 0 0 7	0 0 04
,, ,, not twisted -	- "	from 0 0 5 to 0 0 8	0 0 01
,, ,, dyed		from 0 0 5	8 001
_ ·· •• •	• "	to 0 0 8	15
,, Manufactures, white, not oth		from 0 0 7	1} 004
wise described; also wadd	uug y	to 0 1 2	009
	oureu ,,		
Linen Yarn, all sorts	- "	from 0 0 13 to 0 2 9	} 0 0 1]
m		lífrom 0024	1 i
,, Thread	- 11	to 0 4 2	{ 0 0 2 <u>4</u>
Manufactures		(from 0 0 4	13 004
,,	- 11	(to 0 9 0	1)
Wool Yarn, dyed -	- "	0 0 14	0 0 24
" Manufactures, coarse - fine, milled, and	allemad "	0 0 2	003
Hardwares and Cutlery:	cupper "	0 1 03	1 . 0 1 6
Iron and steel wire -	per 110% lbs.	0 7 04	0 8 43
Ironmongery, coarse and rough	101 21010 1000	0 8 6	0 7 0
fine and polished	• "	1 0 7 01	0 14 0
Incrusted, facetted and plated	- per 1 1 lb.	o i il	0 0 4
Copper, plates or sheets, hammered	OT		·
rolled; also bolts, nails as	nd		
wire Manufactures -	per 110 to 1be.	0 13 5 Ad valorem	0 6 41 Specific
Tin, unwrought -	- per i lo lb.	0 0 01	Free
Lead, pig	per 110 lbs.		Free
rolls	ber viola inc	0 2 2	0 1 6
Leather Manufactures:	,,	1	1
Saddlery, without mounting	- per 1 1 lb.	0 0 5	0 0 4
Gloves	• 11	0 2 8	0 2 9
Shoemakers' work of all kinds	- ,,	from 0 1 84 to 0 2 04	3 016
Salt. rock	per 1,101 lbs.	to 0 2 05	0 2 9
Coals (20 barrels, 1 commercial last)	100 barrels		0 14 04
Beer, in casks	- per barrel	6 5 8	0 6 9
Earthenware or Pottery, all kinds		0 4 6	0 2 41
Porcelain, &c.	- 10	(from 0 6 9	from 0 18 9
	- "	{to 0 18 0	to 4 15 0
Sugar, refined -	2	Prohibited	0 14 04
Rum, at eight degrees (Above that degree, the scale in pr	- per hhd.	2 14 0	206
(Above that degree, the scale in pr	oportion)		l .

ZOLLVEREIN.

Cotton Yarn, unmixed or mixed, unbleached, one or two threads, and waddings per 1104 ibs	0 6 0 0 9 0 0 3 0 0 9 0 0 6 0 0 12 0
--	--

Zollverein—continued. Articles.	Rate of Duty.					
	Articles. 1846.					
Linen Manufactures: Raw twilling and drilling - per 110} lbs. Ribbons, battste, borders, fringes,	E & d. 0 6 0	£ s. d. 0 12 0				
gause, cambric, woven trimmings, laces, stockings, &c. &c " Thread lace " Coffee "	0 3 6 0 8 5 1 13 0	4 10 0 9 0 0 0 15 0				

ZOLLVEREIN.—(Import Duties.) January 1, 1860.

Articles.	New Duty.	Old Duty.
Castor Oil in casks, if, when cleared at the Castom House, 1 lb. per centiner of lbs. avd. turpentine oil, or 1 lb. of rosemary oil 1101 be added Milled and Rified Forged Iron Pipes, for	& a. d.	£ a. d. Not distinguished.
gas and water-works, to be added to Class of Fashioned Iron, paying - "Pens of steel or metallic composition, to be omitted from Class of Hardwares,	_	0 9 0
paying a duty of	Not specified.	7 10 0
cleaned guita percha Lees of all sorts, excepting beer and wine,	090	0 18 0
omit beer "	1 13 0	-
Tallow Pasteboard Covers Dyed Silk and Fleuret Silk, also Yarn of	0 3 0	0 6 0
Cotton and Silk (Twisted) m Tulle to be added to Ribands and Fringes,)	1 4 0	1 13 0) from 16 10 0
paying	Free.	to 8 5 0
Ice, Raw		
Coul Tar Coment (Mastic, prepared with resins and	**	0 1 6
other materials) ,,	**	′

ZOLLVEREIN.—(Export Daties) May 28, 1859.

The Exportation of Cattle, Swine, Sheep, and other Animals for Food, beyond the Western frontier of the Zollverein lbs.	. avd.	Prohibited.	Free-
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HOLLAND.

Articles.	Rate of Duty.					
Arucie.	1846.	1863.				
Iron, in blocks, pigs, ore, forged staves, rods, band, and plate iron, and rails for railroads , Anchors and Cables Machinery Copper, plates, bolts, and nails Coals Lines Manufactures: Salicloth Cables, nets, and all other ropework Salt, raw Sugar, raw, form and clay Iron, in blocks, pigs, ore, forged staves, rods, } per 100 lbs.	# a. d. 1 per cent. ad vnl. 6 per cent. " 6 per cent. " 0 6 8 0 2 6 0 3 4 0 0 10 0 10 0 10 0 3 4 0 1 8	£ a. d. § per cent. at val. 1 per cent. " 1 per cent. " 0 1 8 Free 0 0 6 0 3 4 Free 0 0 4				

BELGIUM.

Articles.	Rate of Duty.						
ar sides.	1846.	1858.					
Woollen Yarn: Unbleached and untwisted - per cwt. Twisted or dyed - " Woollen Manufactures: Casimeres, and similar articles Coasimeres, and similar articles Coasimeres, and similar articles Coasimeres, and similar articles Linen Manufactures: Unbleached, plain, according to the number of threads Printed or bleached, plain cloth, accord- ing to the number of threads Printed or bleached, plain cloth, accord- ing to the number of threads Printed or bleached, plain cloth, accord- ing to the number of threads Printed or bleached, plain cloth, accord- ing to the number of threads Printed or bleached, plain cloth, accord- ing to the number of threads Printed or bleached, plain cloth, accord- ing to the number of threads Note of plain stuffs Per lb. Ribbons - per cwt. Copper, in cakes, blocks, &c per cwt. Copper, in cakes, blocks, &c per cwt. Copper, in cakes, blocks, &c per cwt. Copper, in cakes, blocks, &c per cwt. Copper, in cakes, blocks, &c per cwt. Copper, in cakes, blocks, &c per cwt. Copper, in cakes, blocks, &c per cwt. Copper, in cakes, blocks, &c per cwt.	£ a. d. 0 18 0 1 4 0 7 9 8 1 5 44 {from 1 10 0 to 6 16 10 {from 1 4 0 to 9 0 0 {from 1 16 0 0 3 16 0 0 3 64 0 1 6 0 0 1 6 0 0 1 7 Ad valorem 0 10 7 84 0 1 9	## ## ## ## ## ## ## ## ## ## ## ## ##					

Note.—In 1852 a discriminating duty of 10 per cent. in favour of Belgian vessels was abolished.

This duty amounted to 30 per cent. upon imports from places beyond the Cape of Good Hope and Cape Horn.

FRANCE.

	Rate of Duty.							
Articles.	In French In Foreign Vessels.		1846. 187			858.		
			In French Vessels.	In Foreign Vessels.				
Steel, Raw, drawn per cwt. ,, Cast, drawn ,,	£ s. d. 2 1 8 2 1 8	£ s. d. 3 4 9 2 4 9	£ s. d. 1 8 4 1 16 7	£ & d. 1 10 9 3 0 5				

FRANCE-(Import Duties.) January 9, 1859.

Articles.			Ne	w D	uty.		Ol	d D	aty.
Feathers (Dress), Cock and V colours: In French vessels - In foreign vessels and by lan Others, White: In French vessels - In foreign, and by land Black: In French vessels - In foreign, and by land Grease, extracted from akins fro In French vessels	id -	lb<. avd. 110-20 "" " " " " " " " " " " " " " " " " "	}	Fr	d	{	£ 2 2 8 8 4 4	6.	d. 8 8 8 8
In foreign ,, From elsewhere:		"	Ó	3	24		1	2	2
In French vessels In foreign	: :	n .	8	8	0 2-4		0	19 2	2·3

FRANCE-(Import Duties)-continued.

FRANCE—(Import Duties)—continued.								
Articles.				New	Duty.	Old	Dat	y.
Sago and Salep from India a	nd Fren	ch _		£	ı. d.		£	L d.
Colonies in America: In French vessels			s. avd.	•	0 24	1	• :	•
Sesame, from the West Coast of In French vessels	-			0	0 9-6	İ	0 1	1 23
Flax or Linseed from Zealand for In French vessels Bark Quinquina (Peruvian), from	-	•		Fr	80	l	0 1	l 0·1
In French vessels	T VIII of of	-		0	4 0 R 0	ł	0 1	
Foreign, and by land Cochineal, from French Colonie	•	- 1	ı ïb.	Fr		1	0	
Sarsaparilla, from Senegal a	nd Fren	ch _				l		
Guyana : In French vessels	_		L avd.	0 :	3 0	l	0 10	
., From Entrepôts:		_				-	2 (
In French vessels In foreign	:	-	"		8 0	ì	3 10	
From elsewhere out of l	Europe:		"		4 0	1	1 10	٠.
In French vessels In foreign	-	:	",		8 0 -	1 -	3 10	
Iris, of Florence:			"		-	١,	0 16	
In French vessels In foreign vessels and by lar	nd	_{{	" .	0 :	9 0	[{	0 17	
Aloes, from countries beyond E		•	l	۵ :	2 0	1	8 (19
In French vessels In foreign and by land	-	-	,,		80.	1	0 4	
In foreign and by land "From Entrepots:			"		4 0	i	0 1	3
In French vessels In foreign	:	-			8 0	1	0 1	
Benzoin, from countries beyond	d Europe	:	"	^	4 0	l	2 0	
In French vessels In foreign ,,	:	_	:	0 1		1	3 6	
From Entrepôts:			"			1	2 4	0
In French vessels In foreign	:	:	",	0 1	6 0 D 0	1	2 6	
Balsam Copaiva, from out of Eu	rope:		· .			1		72
In French vessels In foreign	:	-11	b. adv.		0 0·7 0 2:88	ŀ		10-56
" From Entrepôta:			<i>"</i>			l	0 0	9-6
In French vessels In foreign	:	-	:		0 l 0 1·44			10-56
Cotton, from India:			s. adv.			ł		
In French vessels In foreign	:	- 11	10-20		9 0 9 9:4		0 4	0
Wood for Ebonist's trade, of n inches thick, from count Europe:	nore than ries beyon	8	"			}		
In French vessels	_	- 2	20-2	F	res	{ from	0 9	
In foreign	•		,,	0	4 9.8	from		Ť
" From Entrepôts:			<i>"</i>			,		
In French vessels			,	0	2 4.8	{ from	0 9	96
,, of 8 inches and less, fro Europe:	om beyo	nd	"	_			-	
In French vessels	-	•	,,	0	9-6	from to	0 18	0
In foreign "	•	-	,,	0	5 7 -2	from	9 1	
" from Entrepôts:						`		
In French vessels	•	•	,,	•	8 9:4	from to from	2 4	4.8
In foreign ,,	•	-	.	0	5 7-2	to	2 1	7-2
" for buildings, rough, or m square or sawn, being it more than 3-15 inches:	erely hev a thickne	V1) 368						
In French vessels	-	- 1	oad	F	reo		0 6	0.44

FRANCE—(Import Duties)—continued.

Articles	New Duty.	Old Duty.
Steel, in bands or in aheets, white or brown, not polished or tempered: " of more than $\frac{1}{160}$ of an inch thick, and any width — lbs. avd. 110-20 " of 1 millimetre or less thick, and 38-10 inches wide — " " less than 38-10 inches wide — " " less than 38-10 inches wide — " " less than 38-10 inches wide — " I aminated in bars or plates: In French vessels — " Detached Pieces of Agricultural Machinery in brass or pure iron, or	£ 2. d. 1 0 0 1 10 0 2 4 0 0 12 0 0 12 0	Not distinguished
coated with steel: In French vessels In foreign ,, } 220-20	0 12 0 {	from 12 to 48 from 12 9-6 to 86

FRANCE-(Export Duties.)

The prohibition to export articles of war removed	•••	_
Corsica.	'	
Sulphate of Iron - Ibs. avd. 110 20	Free	0 0 1-20

PORTUGAL.

Articles	Rate of Duty.					
aradas.	1846.	1853.				
Cotton Yarn according to number White or coloured - state of the coloured - s	from 0 0 24 to 0 1 14 from 0 0 48 to 0 0 28 from 0 0 15 to 0 0 11 to 0 1 18 from 0 0 11 to 0 1 18 to 0 1 14 from 0 0 11 to 0 1 24 from 0 0 12 to 0 1 28 1 1 7 0 0 6 9 0 1 2 8 0 1 2 8 0 1 2 8 0 1 4 6 0 1 2 8 0 1 2 8 0 1 4 6	from 0 0 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				

Portugal	conti	nued.			Ì	B	ate c	l Dut	y .	
	Article	6.			;	L846.			184	13.
Woollen Manufactu Carpets — Damasks — Shawls and handl Meriao of any o Plain cashmers Any others Motals: Iron, bar and pig "Sheet "Hoops "Chains, and "Wire Steel, unwrought Hardware:	rerchiefs: colour with pris	•	- ·	per lb. """" """ """ """ """ """ """ """ """	{ from to	6 4. 0 1 0 2 0 10 0 2 0 5 0 1 0 1 0 2 0 5 0 2	9 4 8 9 8 5	3	0 0	01 101 0 1115 101 4.5 6.5
Tools of all kinds Scissors Cutlery: Knives, &c., with Ditto Ditto Colonial Produce: Sugar, raw Cocca Coffee without sh , with shell Rum	bone had	ndles	- - - - - - - - - - - - - - - - - - -	n n n n n	from to	0 11 1 2 14 1 2 16 5 12 13 10 0 8 0 5 0 11 0 8 1 2		,	0 13 6 15 2 14 3 7 4 1 0 13 0 4 0 15 0 12	6 0 6 0 6 9 7

PORTUGAL—CAPE VERDE ISLANDS—(Import Duties.)

Articles.	New Duty.	Old Daty.
Horses, Cattle, Sheep, Goata, Horses, Mules, Swine, and Camels Hogs' Lard, Mutton, Beef, Pork (fresh and sait), Bacon, foreign Portuguese productions, and in na- tional vessels Indian Corn Flour (from and after 1st Jan. 1860) barrel	£ s. d. Free 0 0 648 Free 0 0 108	E s. d. Not given 0 5 5 —

SPAIN.

Articles.	Rate o	Duty.
Aracios.	1846.	1853.
Linen Manufactures of all kinds and qualities (except lace) Thread lace of all kinds: plain figured Woollen Manufactures of all kinds and qualities per 0.860 aquare yard cotton Manufactures of all kinds, including lace per Ib. Cotton Yarn Silk Manufactures of all kinds, including blonde, lace, and ribbons ""	from 5 1 10 to 45 17 74 0 2 75 specific from 0 0 64 to 0 16 8 Prohibited Prohibited from 0 4 9 to 1 18 10	from 4 9 4 to 31 5 10 0 1 7 and valorem 0 8 4 from 0 1 5 4 from 0 1 1 to 0 2 18 from 0 6 11 to 2 10 3 3

SPAIN—continued.	Rateo	f Duty.
Articles.	1846.	1853.
Iron in pigs per 101 lbs. Machinery: Steam-engines ' "Other	### ### ##############################	£ a. d. 0 2 15 0 2 16 0 2 16 0 10 86 3 per cent. ad val. duty imposed. ad valorem. from 0 0 76 to 0 2 04 0 0 66 0 8 114 0 7 6 40 per cent. ad val. 1 15 10 0 8 55 0 8 55 0 8 113 1 6 95 specific. 0 3 16

SARDINIA.

					_	_	_		_	-	
Linen Manufactures:				1				1			
Less than six threads:				ł				1			
Unbleached -	•	- 1	per Ib.		0	0		1	3	0	011
Bleached -	•	-		1	0	0	라	1 .	Ŏ	0	14
Less than nine threads	3:			1			_	1			•
Unbleached -	•	-	**	1	0	0				0	2]
Bleached -			99	1	0	0	7≩	i .	0	0	8
Mixed with cotton or v		or in		1				1			-
any other way	wrought:			1	_	_		1			
Unbleached -		-	99		Ō	0				0	#
Bleached or mixed v	vith white	•	99	l	0		10	1 '	9	Ó	
Coloured or dyed -	-	-	99	1	0	1	0#		Ď	Õ	6
Printed -			79	1	Ō	1		1 '	0		81
Embroidered in cotte		Moor	**	ı	0	1				0 1	
Thread lace, 1st quality	-	-	27	1	ŏ	7	2 81	1 9			64
,, 2d quality - Cotton Manufactures:	•	-	11	I	U	0	94	1 '	י	9 1	V\$
Stuffs of cotton also m				I				1			
wool, plain, tv				I				ı			
wool, plain, to	amed, or m	any		1							
Unbleached -	_	_			0	•	81			0	41
Bleached -	_	_	99		ŏ	ň	10	1 3			31
Coloured or dyed -			**	1	ŏ	ĭ	O#	1 7		5	4
Printed			17	!	ŏ	î	šĬ	1 7			š
Embroidered with lin	en cotton or	- mool	"	1	ŏ	i	9	1 7		i i	
	,	W-0-0-2	**	1	•	_	-,	/ Plain o			
				i				exceed			
				ı					VA		
Bobbinet	ė	_		i	0	8	63) 3		
			**	1			•	under	15	fra	'n
				l .				₩.	alu	8	
											8ŧ
Woollen Yarn, raw -	-	-	**	ı	0	0	4,78	` 0			2
., ,, dyed -	-	-	11	1	0	0	64	. 0	() :	8
Woollen Manufactures : (lovers and ca	rnets	••	from	000	0 0 0 1	66.50	} 0		٠.	4
		•	77	(to	0	1	어	,	•		••
Cloth of wool, or hair of a				(from	0	1	23	0		. :	81
or not, mixed with	unen or co	cton, }	19	to	ŏ	i	71	ā			oi i
plain or figured -	-	- 3		,	•	_	٠.١				•
Metals:	_			I			. !	_			、 I
Iron rails for railways	•	- pe	rcwt.	1	¥	2	8				
, wire -	-	-	99	l	0	ĕ	ő	0	4	1	
W MTD	-	•	27	I	J	•	٧Į	u	•	•	'
				l .			ı				- 1

SARDINIA—continued.		Rate of Duty.								
Articles.	Articles.			Articles. 1846.			l.	1853.		
Metals—continued. Iron carriage springs " rods and agricultaral imp " machinery, such as weaver Copper in cakes " wrought - sugar, refined - Fish, codfish " pilchards Leather Wares: Harness Ornamented Glass Mirrors, not framed Sheet - Wrought, of all kinds Earthenware and Porcelain Stoneware Porcelain White - Coloured	olements - Î	ec cwj. 11 12 13 14 15 15 17 17 17 17 17 17 17 17 17 17 17 17 17	£ £ £ 4 4 0 10 0 4 4 0 3 0 6 6 0 16 0 18 0 4 0 14 0 7 0 1 1 0 0 4 0 8 0 14 1 0 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0	000740	2 4 0 12 0 2 0 1 0 1 0 1 0 1 1 1 1 1 2 1 6 0 6 0 6 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1	71 31 6 71 71 71				

SWITZERLAND.

		_
Cotton Yarn and Thread, unbleached per 1101 lbs.	008 018	
	0 0 3 0 2 11	
6-44	003 066	
1	0 0 8 0 9 11	
Linen Manufactures:		1
Mahla manufactures:	l l	
Ticking and cloth (having less than 40	l	
warp threads to the inch), unbleached	D 0 8 0 1 8	
and andyed " "	003 068	
Cloth or tape, bleached, dyed, or printed ,,		
Wool, raw or combed "	0 0 11 0 0 3	
Woollen Yarn, raw, not dyed,,		
,, dyed or bleached - ,,		
Woollen Manufactures, all kinds - ,,	0 0 8 0 6 8	
Silk Manufactures "	003 6126	
Iron, pig and bar ,,	0 0 14 0 0 3	
Steel, unwrought ,,	0 0 14 0 0 74	
" plates and wire - "	001 0211	
Hardwares: Unwrought, cast; plates,		
stoves, wheels, &c ,,	0 0 13 0 0 75	
Cutlery of every description ,,	008 068	
Copper or Brass Goods, cast "	008 068	
Paw	0014 0074	
Tin in blocks	001 007	
Lead in pipes or rolled, &c ,,	001 018	
Glass bottles, common,	0 0 14 0 1 3	
window, not coloured "	0 0 3 0 2 11	
, wares, fine; crystal wares, cast or		
polished, and coloured glass - ,,	002 068	
Leather Manufactures, fine:		
anddlery, harness, boots, shoes,	l l	
l " _1 ha	008 0196	
	008 068	
1 35 Atraum all sants	008 018	
Communication of the communica	0 0 2 0 2 11	
Sugar of every description	Free 0 0 11	
Salt, kitchen ,, Coals - per collar	Free 0 0 1	
	0 0 14 0 2 11	
Fish, all sorts - per 1101 lbs.		
Beer in bottles ,,	0 0 14 0 19 6	
,, in casks - "		
Farthenware and Porcelain - ,	003 068	
common crockery - ,,		
Coffee and Cocoa		
Rum, in casks ,,	0 0 8 0 2 11	
" in bottles "	0 0 3 0 12 6	

AUSTRIA.

Articles	Rate of Duty.
AI sicios.	1846. 1853.
	£ s. d. £ s. d.
Cotton Yarn, unbleached, undyed, and un-	2 5. 4.
twisted - per 110,20 lbs.	.018 2 014 0
dved n	1 16 4 1 10 0
Cotton Manufactures:	
Fine bobbinet - per 1 to lb.	0160 050
Embroidered	1100 050
Linen Yarn, unbleached - per 110 100 lbs.	0 4 6 0 5 0
,, ,, dyed and bleached - ,,	255 200
" thread »	
Linen Manufactures: coarse, as packing canvas, sacks, &c. ,,	4 11 8 0 15 0
,, coarse, as packing canvas, sucks, etc. ,, lawns, cambries, &c,	1 . 66 0 0 1 10 0 0
Wool, raw	010 002
Woollen Yarn, undyed "	0 10 0 0 12 0
dved "	0 15 0 1 5 0
Woollen Manufactures, fine, as casimeres,	
merinoes, plush, &c ,,	20 3 4 10 0 0 (frem 0 5 0
Silk Manufactures per 1 to 1b.	1 0 0 frem 0 5 0 to 0 12 0
100.00 %	0 8 44 (10 0 13 6
Iron, raw per 100 100 lbs.	0 12 0 0 0 0
n bars n	0 12 74 0 5 0
Lead, raw	084 016
Hardwares and Cutlery	
All cast, hammered, and wrought work,) from 1 4 0) 0.10 0
also household wares, and agricul- } ,,	{ to 6 0 0 { 0 10 0
tural implements, &c)	,~~ · · · ,
Fire-arms, razors, penknives, surgical	684 2100
instruments, &c. &c	0 13 4 0 5 0
Glass, in plates, &c.	255 1100
Leather, varnished, polished, &c " manufactures, gloves "	9 1 8 1 10 0 0
ahoemakers' and saddlers' work	4 10 10 5 0 0
Sugar, refined "	1160 180
Coals "	0 0 0 ¹⁹ free
Fish, Herrings - "	0 4 0 0 8 0
Beer and Ale, in bottles or jars	0 10 0 0 15 0
Coffee, raw per cwt.	1 2 9 1 0 0 15 0
Cocoa, raw - ""	1 6 8 0 15 0
Rum and Arrack "	1 . 0 0 1

Austria-(Import Duties.)-Oct. 1859.

Articles.				New Duty.	Old Duty.		
Servian Pigs -	-	•	- each	£ s. d. 0 16 0	£ s. d. 0 4 0		

TURKEY.

Audiotos		Rate of Duty.								
Articles.	10		1853.							
Cotton Manufactures:	£	4.	đ.	£	å.	d.				
Calicoes, or domestic grey per oke, or 21 lbs. Cambrics, plain and white, 5/4 and 6/4 wide,			1-309	0	0	0.745				
12 yards, or per piece -	0	0	1.782	0	0	1.336				
,, 8/4 wide, 24 yards, or per piece -	_ Ŏ		4:636	Ŏ	Ŏ	2.364				
per piece	0	0	1.818	0	0	1.200				
twilled, grey, 24 yards, or per piece -			8-278	Ŏ	Õ	1.309				

Turkey—continued.	Rate of Duty.	
Articles.	1846. 1853.	
Velveteens 30 yards, or per piece Handkerchiefs Lappet shawls Nankeens, plain and striped Muslins (Sevaspoor) 11/9 Callcoes, printed one or two colours three to six colours Muslins, printed dyed, 36 inches Stocklugs Cotton Yarn grey and white Woollen and Worsted Goods: Blankets Carpets Carpets Shadee Ton, in bars in plates Wire, Iron and Brass, fine Wire, Iron and Brass, fine Wire, Iron and Brass, fine Wire, Iron and Brass, fine Wire, Iron and Brass, fine Wire, Iron and Brass, fine Coals Beer, in bottles Coals Per 125 ibs. Codfish Per 125 ibs. Per 125 ibs. Per 125 ibs. Per 125 ibs. Per 125 ibs. Per 125 ibs. Per 125 ibs. Per 125 ibs. Per 125 ibs. Per 125 ibs.	### A	

MEXICO.

	Rate of Duty.	
Articles.	1846.	1853, Commencing on the 1st of October.
Cotton Yarn - per lb. Cotton Manufactures; socks for adults per dos. pairs children sheetings, of 30 or less threads per yard of more than 30 threads muslins, white and coloured, fine - more than 30 threads muslins, white and coloured, fine - per lol lbs. Woollen Yarn - per lol lbs. Broadcloth, one yard wide, fine - per yard Casimere, one yard wide, fine - per yard Casimere, one yard wide Woollen stuffs, plain, white, and coloured, one yard wide Linen Yarn - per lol'lbs. Linen Manufactures; Plain cloth, not over 36 threads, one yard wide Silk Manufactures; Blondes and laces - per lb. Silk for embroidery Iron, in pigs - per lol'lbs. bar Steel - m	£ s. d. Prohibited 0 6 0 0 3 240 Prohibited 0 0 7:20 0 0 5:77 0 16 0 0 2 4:80 0 4 0 0 3 0 0 7:20 0 16 0 0 3 36 2 8 0 0 8 0 0 12 0 0 8 0	S z. d. 0 0 7:20 0 2 0 0 1 2:40 0 0 2:48 0 0 2:48 0 0 2:88 0 10 0 0 1 4:40 0 2:88 0 10 0 0 1 7:20 0 3:60 0 9 7:20 0 0 2:40 1 12 0 0 4 9:60 0 4 9:60 0 4 0 0 6 0

Mexico—continued.		Rate of Duty.						
Article	M.		1846.	1852, Commencing on the 1st of October.				
:	:	per 101 lbs.	£ s. d. 1 4 0 2 0 0	£ s. d. 1 12 0 1 4 0				
es: - -	•	per dos. pair per 101 lbs.	0 3 0 1 0 0	0 4 0 0 18 0				
:	:	- "	Prohibited 1 12 0	1 4 0 0 16 0 1 4 0 3 8 0				
	Article	Articles	- per 101 lbs per doz pair - per 101 lbs per doz pair - per 101 lbs.	Articles. 1846. per 101 lbs. 1 4 0 2 0 0 8: per dos pair 0 3 0 per 101 lbs. 1 0 0 " 112 0 " Prohibited " 112 0				

WURTEMBURG—(Export Duties.)

Prohibition to export Cattle, Horses, Oats, and Gunpowder beyond the Date of Alteration, western frontiers of the Zollverein removed - 28th July, 1859.

TUSCANY-(Export Duties.)-5th Sept. 1859.

Articles.	New Duty.	Old Duty.	
Alabaster: Rough, hewn, and chiselled Works of art therein - Vegetables (not tariffed) -	- 75 lbs. avd.	£ s. d. 0 0 0·4 0 0 0·4 0 0 0·80	£ & d. 0 2 0 0 0 8 0 0 2

HATTI (PORT-AU-PRINCE)—(Export Duties.)—17th June, 1859.

Coffee	- 110 lbs.	avd 0 7 0	the 5th part in kind							
Brazil	BRAZIL—(Import Duties),-30th Sept. 1859.									
Sweet Wines: Malmsey, Muscatel, &c. Wines not denominated -	- 2·853 - ,,	qts. 0 1 6-2 0 0 8-64	0 1 42 0 0 54							
Brazil—(Export Duties).—30th Sept. 1859.										
Monopoly of exportation a Dye-wood abolished, and On Cotton, Coffee, Sugar, H duce, exported at the Pot	Export Duty impose ides, and all other l	d } Ad val. 15 per cent.	Monopoly of ex- portation 12 per cent.							
ARGENTINE RE	PUBLIC(Impo	rt Duties.)—29th Au	g. 1859.							
All goods imported -		- 20 per cent. ad val.	12 per cent. ad val.							
	CHILI—(Impo	rt Duties.)								
Fire Arms, Side Arms, Gunpowder, and other warlike stores, prohibited Date of Alteration, to import without special license Powder for Mines may be imported at the port of Valparaiso only 23rd Sept. 1859.										
CHILI—(Export Duties.)—30th May, 1859.										
Of Copper smelted by Chilis	ın coal -	- 4 per cent. ad val.	Free							

TASMANIA. Since the abolition of transportation, the name of Tasmania has been given to the colony of Van Diemen's Land. According to the census taken on 31st March, 1857, the population was ascertained to number 81,492 persons. On the 1st January, 1859, it was estimated to be 84,420. The increase in the last decennial period is very small, but is accounted for by the fact that in the three years succeeding the gold discovery in Victoria in November, 1851, no less than 45,884 persons, principally men, left Tasmania for the uncertain employment of gold digging. The revenue of the Colony in 1858 was £391,706, and in 1859 (including a balance brought on from previous years of £34,167) £312,047. The expenditure was in 1858, £357,538, and in 1859, £307,109.

Wool is largely exported to Great Britain, the annual quantity varies from 400,000 to 500,000 pounds, worth from £400,000 to £500,000 a year in the London market. The number of sheep in Tasmania is about 1,600,000. The annual clip is therefore from 2 to 2½ pounds from each sheep. There are more than 30,000 pigs in the Colony, 80,000 cattle and 21,563 horses. On the 1st January, 1859, there were 150,000 acres of land under cultivation, 100,000 of which was with grain. Nearly two million acres of land are rented from the Crown by sheep and cattle holders for depasturing their flocks and herds, the average rental being over one pound for every hundred acres, paid yearly in advance.

The total imports into the Colony in 1859 were in value £1,164,526 (Hobert

The total imports into the Colony in 1859 were in value £1,164,526 (Hobert Town £662,397 and Launceston £502,129), and the total exports £1,085,905 (Hobert Town £554,547 and Launceston £531,558.) The following are the figures for the last five years:—Exports: 1855, £1,428,629; 1856, £1,207,802; 1857, £1,354,655; 1858, £1,151,609; 1859, £1,085,905. Imports: 1855, £1,559,797; 1856, £1,442,106; 1857, £1,271,087; 1858, £1,398,612; 1859, £1,164,526.

The Amount of Customs' Revenue and Port Charges collected at the Ports of Hobert Town and Launceston, respectively, have been:—

Years.	Port of Hobert.	Launcoston.
	£	£
1855	109,891	57,879
1866	83,908	55,359
1857	82,475	58,830
1858	84,229	67,822
1859	74,879	65,384

A RETURN showing the QUANTITY and VALUE of WOOL and TRAIN OIL exported from TASMANIA, from the Year 1848 to 1857 inclusive.

Year.	Wood.		TRAIN OIL	
1848	Bales. 13,433	£ 195,143	Tuns. 1015	£ 47,309
1849	17,581	202,384	6293	86,830
1850	19,517	248,869	921	49,547
1851	19,279	249,953	928	49,023
1852	15,414	245,201	632	36,776
1853	19,524	826,096	839	80,106
1854	19,774	225,384	225	27,423
1855	18,939	378,822	585	46,165
1856	19,518	819,961	877	54,280
1857	98,757	393,646	570	45,136

TAS

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i.

The following	is the Tar	iff of the	Colony	:				s of ty.
	other spirits	, cordials, a	nd stron	ng waters, except	ing rum, per	gallon	12	
bottle, for a	any greater of a gallon.	or less quar	ct to spatity the	pirita, cordiala, a un a gallon, not b	nd strong wa being less tha	ters in in one-		
Wines, in wood	L per gallon						3	0
Ditto in bottle,	per dozen r	eputed quar	rts	•			3 6 3	0
Ditto, ditto.	per dozen r	eputed pint	8.					0
And so on in quart or pi	proportion i	for any gree	ster or	less quantity the	an a dozen r	eputed		
Tobacco, per p	ound .			•	•	:	2	6
Ditto, soaked,	for sheep-dre	esing, ditto					Ó	8
Cigars, ditto .							3	3 0 3 1 1 0 0
Snuff, ditto .			-	-			ō	3
Tea, ditto .			-	2	_		ŏ	Ř
Coffee, ditto .							ŏ	14
Refined spears	_that is to	av loef end	crnshe	d sugars, and su	ear candy. ne	er cwt.	ă	Ů,
All other sugar	s and moless	os ditto	. 01 00110		Bon amma'i b			ň
And so on in	proportion i	or any gree	ter or le	ese quantity than d weight.	a hundred v	veight,	•	·
Dried fruits, pe	r pound	•		•			0	1
Hops, ditto .	-							2
Malt, per bush	al .		•				1	0
Malt liquors in	wood, per g	allon					1 0 1	8
Ditto in bottle,	per dosen r	enuted quar	ta				í	6
Ditto, ditto, per	rdozen renni	ed nints	_		·		Õ	ğ
And so on in quarts or p	proportion for	r any great	er or les	s quantity than	one dozen r	eputed	Ĭ	•

TEA. The consumption of tea has enormously increased of late years. In 1836, as mentioned at page 646, a consumption of 49,000,000 lbs. in the United Kingdom was considered extraordinary, but in 1860, the consumption reached 86,200,000 lbs., having gone on steadily increasing, as the following figures will show;-

		1bs.	1		Ths.
1842	-	37.355.911	1852	-	54,713,034
1843	-	40,293,393	1853	-	58,834,087
1844	-	41.363,770	1854	-	61,958,041
1845	-	44, 193, 433	1845	-	63,429,286
1846	-	46,740,344	1846	-	63,278,812
1847	-	46.814.821	1857	-	69,132,101
1848	-	48,734,789	1858	-	73,195,685
1849	_	50,021,576	1859	-	76,362,008
1850	-	51,172,302	1860	-	86,200,000
1041		52 040 050			,,

The export of tea from the single port of Shanghai in China, in the year ending June, 1860, was 53,463,770 lbs., being an increase of 14,031,778 lbs. over the previous year's exports. The duty on tea was reduced on the 1st June, 1853, to 1s 10d per lb.; for the 6th April, 1857, to 1s 5d per lb. The revenue derived

from the tea duty now reaches nearly £5,500,000.

It is not probable that the consumption of tea in the United States, where it pays no duty, and is a cheap article as compared with other countries, is much affected in ordinary years by price. It will therefore approximate very near the truth to apportion this aggregate consumption according to population. In 1850, with a population of 23,200,000, the consumption of tea was 27,858,482 lbs.; in 1859, with a population of 30,400,000, the consumption was 36,504,218 lbs. The consumption of tea in France is very limited. The mean annual consumption in the years 1848 to 1852, was but 387,844 lbs., and in 1853 to 1857, 417,344 lbs. The consumption of coffee, on the contrary, reaches 53,000,000 lbs. besides an im-

mense quantity of chicory. In Holland about 3,000,000 lbs. of tea are used, in North Germany, 2,000,000, and in Russia, 14,000,000 lbs.

PARAGUAY TEA. A large trade in this tea, obtained from the leaves and twigs of several species of *Ilex*, is carried on in some of the South American States. The exports from Paraguay average about 25,000 cwts. per annum, of the v.lue of 20s to 30s per cwt. Brazil exports of this tea to the value of £500,000 annually, and the quantity imported into Chili averages 35.000 cwt.

An Account showing the QUANTITY of Tea annually entered for Home Consumption in the United Kingdom, with the average and aggregate Amount of Duty collected thereon, specifying the QUANTITY entered in LONDOM, the Amount of Duty thereon, the QUANTITY entered in Ports other than London, and the Amount of Duty thereon, and severally, the relative Pre-centage of Import and Per-centage of Duty collected, from the Year 1848 to 1859 inclusive.

Years.	Tea entered for Home Consump- tion.	Duty received.	Average rate of duty per lb.	Average price per lb. in Bond.	Tea entered for Home Con- sumption in London.	Duty received thereon.
	lbs.	Z.	2 4	s. d.	lbs.	£
1848	48,734,789	5,329,992	2 21	1 01	27,241,080	2.979.491
1849	50,021,576	5,471,422	2 2	1 1	27,926,528	3,054,464
1850	51,172,302	5,596,961	2 2	1 3 1	28,838,958	3, 154, 261
1851	58,949,059	5,900,625	2 2	1 2 Å	30,774,039	3,365,916
1852	54,713,034	5,984,172	3 2	1 0	31,240,612	3,416,942
1853	59,834,087	5,683,791	1 114	1 34	31,732,305	3,074,067
1854	61,953,041	4,780,149	1 6	1 24 1 04 1 34 1 34	88,235,356	2,561,892
1×55	63,429,286	5,310,275	1 8 1	18	35,193,972	2,932,831
1856	63,278,212	5,536,626	1 9	1 24	35,658,309	3,120,102
1857	69,159,848	5,060,048	1 5	1 5	37,900,773	2,763,596
1858	73,217,484	5, 186, 170	1 5		41,253,009	2,922,110
1859	76,362,008	5,408,924	1 5	1 6	44,338,075	3,140,538

Years.	Tea entered for Home Consump- tion in other Ports.	Duty received thereon.	Per-centage of Import Port of London.	Per-centage of Imports into other Ports.	Per-centage of Duty collected in Port of London.	Per-centage of Duty collected in other Ports.
	lba.	£	lbs.	lbs.	T.	£
1848	21,493,729	2.350,501	70.39	29.61	55.9	44.1
1849	22,095,048	2,416,958	76.95	23.05	55.82	44.18
1850	22,834,344	2,442,700	74.15	25.85	56.36	43.64
1851	23,174,970	2,534,709	72.93	27.07	57.04	42.96
1852	23,472,422	2,567,230	77.29	22.71	57.1	42.9
1853	27,101,782	2,609,724	73.81	26.19	54.08	45.92
1854	28,717,685	2,218,257	83 2	16.8	53.6	46.4
1855	28,235,314	2,377,444	83.7	16.3	55.23	44.77
1856	27,619,903	2,416,524	82.59	17.41	56.35	43.65
1857	31,259,070	2,296,450	84.79	15.21	54.62	45.38
1858	81,964,475	2,264,060	90.28	9.72	56.34	43.66
1859	32,023,933	2,268,386	91.39	8.61	58.06	41.94

TEAK. In 1833 we only imported 34 loads of teak from places within the limits of the East India Company's territories, and 13,624 loads from other quarters. In 1843 the Indian shipments had advanced to 5475 loads, and in 1849 to 17,460 loads out of a total import of 27,702 loads. In 1859 the total imports were 29,659 loads, of which 24,096 loads came from India, 4673 loads from Sierra Leone, and 890 loads from other quarters. The so-called African teak is the produce of Olifieldia Africana. It is every year becoming more scarce, and has to be brought from a long distance in the interior. In 1841 we received 13,127 loads from Western Africa, but in 1859 the imports were under 5000 loads.

TERRA JAPONICA. This is a trade-name for gambier, an astringent tanning substance: the imports and prices for the last thirteen years, will be found at pages 194, 195

TEXAS. The area of this State is 274,356 square miles. Population in 1850, 212,592, of which 154,034 were whites. Austin is the capital. The estimated quantity of vacant public lands is about one hundred millions of acres. The value of the exports in the year ending June 30, 1858, was about £500,000, and of the imports only £22,620. Texas was admitted into the American Union in 1845.

TIMBER. In 1851 were imported over one million loads of sawn or split timber, and about the same quantity of unsawn timber. It is impossible to make a comparison of the entire progress of timber-consumption, owing to the absence of data for estimating home production, the various forms in which it is entered, and the subdivision of dimensions, &c. But as the total consumption of squared timber in 1801 was but 161,869 loads; in 1831, 546,078 loads; in 1851, 1,061,477 loads; and in 1859 about the same amount, we can perceive how immense has been the increase during the present century.

The total quantity of wood and timber imported into the United Kingdom in 1859 consisted of the following:—

The aggregate value of these woods was £9,893,225, besides mahogany and teak separately noticed, the computed value of which was £702,799. The duties on timber have been, on squared-timber from British possessions, 1s per load since 10th October, 1842; on foreign timber, 7s 6d per load since 15th April, 1851; deals and battens. 2s 1d British, and 10s foreign, from the same dates. Lath, 1s per fathom British, and 12s foreign. All ship-building, dye-woods and hardwoods, free since 1845.

TIN. The total quantity of tin-ore raised in Cornwall and Devonshire in 1858 was 10,618 tons, the average value of which was about £64 per ton. This black tin or tin-ore produces on the average 65 per cent of metallic, or white tin as it is called. The quantity of this metal of British produce brought into the market is about 7000 tons annually, worth about £824,000. Our annual imports of tin, chiefly from the eastern countries, amounts to 2800 tons. Of this foreign tin there is exported about 350 tons, of British tin 2800 tons. About 600 tons of foreign tin-ore and regulus are also imported yearly. The article tinned plates is shipped yearly to the value of £1,500,000, besides tin and pewter wares to the extent of £30,000 to £40,000.

TOBACCO. In order to show the progress of the tobacco trade in a series of years, I direct attention to the following official returns:—

TOBACCO STATISTICS.							
Years.		Quantity Imported.	Retained for home consumption.				
		lbs.	lbs.				
1850	Manufactured	1,557,518	196,446				
	? Unmanufactured	85,166,358	27,387,960				
1851	§ Manufactured	2,331,862	209,337				
	Unmanufactured	81,049,654	27,705,687				
1852	§ Manufactured	2,918,515	199,711				
2008	Unmanufactured	83 ,185,085	28,218,857				
1853	Manufactured	4,312,037	216,127				
1000	Unmanufactured	29,349,568	29,318,568				
1854	Manufactured	2,710,063	205,910				
1004	Unmanufactured	8 2.492,851	30,198,975				
1855	(Manufactured	2 651,544	218,583				
1000	Unmanufactured	36,82 0,846	80,274,001				
1856	Manufactured	1,855,104	249,237				
1000	Unmanufactured	44,788,130	82,329,731				
1857	(Manufactured	1,699.177	252,880				
1001	Unmanufactured	42,048,535	32,604,033				
1858	Manufactured	2,573,925	259,939				
1000	Unmanufactured	49,643,780	33 ,850,911				
1859	(Manufactured	2,06+,696	297,976				
1003	Unmanufactured	48,606,579	34,492,075				

The progress of the export trade since 1852 may be thus traced:-

EXPORTS OF TOBACCO.

Years.	Manufactured. lbs.	Unmanufactured. lbs.	Years.	Manufactured. lbs.	Unmanufactured. Iba.
1852	1,808,596	6,574, 954	1856	1,542,381	10,507,219
1853	2,107,893	9,195,576	1857	930,827	10,663,979
1854	2,440,257	11,318,594	1858	1,245,263	9,259,973
1855	2,114,121	8,719,884	1859	1,555,845	11,171,364

These statistics prove that the trade is liable to severe fluctuations, and that the gains or losses of those immediately interested in it must be of an extensive character. This point, however, is an individual, and not a national question; but, viewing it in the latter light; we may reasonably ask—would it be wise to abolish duties upon a single article of luxury which yield an amount equal to an annual income tax of fivepence in the pound, in order that we may have an additional number of confirmed consumers of tobacco at a lower cost to themselves? The amount of revenue from tobacco must seem enormous, when we draw attention to the annexed returns, showing the net produce in a series of vears:—

NETT DUTY ON TOBACCO.

1850		£3,683,206	1855		£4,821,600
1651		4,466,499	1856		5,019,682
1852		4,542,571	1857		5,103,528
1858		4,728,642	1858		5.212.604
1854		4.773.555	1859		5.552.247

The duty on tobacco is still 3s 1d and a fraction per pound.

TREATIES OF COMMERCE. With the following countries we have treaties of reciprocity, containing "most favoured nation" clauses, and clauses providing that British ships shall receive national treatment unconditionally:—Bolivia, Buenos Ayres, Chili, Honduras, Johanna, Mecklenburg-Schwaria, Mecklenburgh-Strelitz, Mexico, Morocco, New Granada, Oldenburgh, the Roman States, and Venesuela. With the following countries we have treaties of a similar kind, but in which the most favoured nation clause is conditional: Austria, Costa Rica, Dominica, Equator, Guatemala, Hanover, Libera, Paraguay, Russia, Sardinia, the Sandwich Islands, and Uruguay. With Abyssima we have a treaty of reciprocity with a most favoured nation clause; with Belgium one with a national treatment clause; with Borneo a simple treaty, not of reciprocity, containing a most favoured nation clause, and one providing that British ships do not pay more than a dollar per ton; with China, Japan, and Persia a simple treaty, containing most favoured nation clauses; with Denmark a reciprocity treaty providing for national treatment; with France, a treaty of reciprocity, dated January, 1826, with a most favoured nation clause, and provision for national treatment in direct trade and in ballast; with Frankfort, Greece, Prussia, and Tuscany, reciprocity treaties providing for national treatment; and with Muscat, a simple treaty with a most favoured shall cover tonnage dues. With the Netherlands we have treaties of reciprocity, placing us conditionally on the footing of the most favoured nation, and providing for national treatment. With Peru we have a reciprocity treaty, with a conditional most favoured clause, and provision for national treatment on vessels over 200 tons; with Portugal and Sicily a similar treaty, providing for national treatment in direct trade and ballast. With Siam we have a simple treaty, with a most favoured clause, which provides that British shipping shall be exempt. Finally, with Switzerland and Turkey we have reciprocity treaties with a

TRIPOLI. The number of vessels that entered at Tripoli, in 1857, was 151 of 16,007 tons, bringing cargoes valued at £110,800, of the vessels 27 of 2424 tons were British.

TUNIS. The number of vessels that entered at the Port of Golitta, (Tunis)

in 1854, was 547, of 63,398 tons, bringing merchandize of the value of £326,463; of these 68 ships and 17,071 tons were British.

TURMERIC. The imports of this root are now large, amounting in the three

years ending with 1859, to 2200 tons, worth about £15, 16s pes ton.
TURPENTINE. The foreign imports of this oleo-resin, chiefly received from the United States, seem to be on the decline. The imports in the last fifteen

years have ranged from 13,500 tons to 24,000 tons, per annum. In 1840, the imports were 381,502 cwts.; in 1850, 437,121 cwts.; and in 1859, 256,663 cwts. TURKEY. According to the census taken in 1844, the population of the Turkish Empire was in Europe 15,500,000; in Asia, 16,050,000; in Africa, 3,800,000. Total, 35,350,000. Our exports to Turkey Proper average about

£4,006,000, and our imports therefrom £2,730,000.

Finances. The public debt of the Ottoman Empire in 1854, including the FINANCES. The public debt of the Unionan Empire in 1854, incruming the floating debt and paper money, stood at about £3,000,000, since then the Russians war and other expenses have further disorganized the finances—and there has been a great accumulation of debt. In 1854 a loan of £5,000,000 at 6 per cent was announced, but only £3,000,000 issued. In August, 1855, a 4 per cent loan for £5,000,000 was concluded under the guarantee of England and France to afford the Government pecuniary assistance in its struggle against Russia. In December, 1856, another loan was raised of £12,000,000 at 6 per cent, of which five millions were applied to the necessities of the State, three millions for the Sultan, and four millions for redeeming the paper money, and to equalize and render uniform the depreciated silver and copper coin. In May 1858, a loan for £5,000,000 was contracted locally at 7 per cent, and new State obligations issued for £4,250,000 at 6 per cent. In October, 1858, another loan of £5,000,000 was brought out, and in the close of 1860 a further loan of about £16,000,000 was

sought in France and partially obtained.

The ordinary revenue of Turkey is about £6,732,000, besides £427,850 tribute from the dependent provinces. The expenditure and official peculation are great; but the resources of the country are considerable, and if duly developed, will, with peace, extended trade, and improved internal means of communication,

do much towards benefiting the country.

PORTS. Constantinople. The vessels that entered at Constantinople in 1856. were 17,868, measuring 3,750,000 tons.

The following is a Tabular Report of the Shipping Statistics of the

PORT of CONSTANTINOPLE for the year 1859:-

Countries.	Arrivala.	Tons.	Depar- tures.	Tons.	Total of Ships.	Total of Tons.
Turkey Wallachia Wallachia Wallachia Wallachia Wallachia Servia Samos America Belgium Belgium Belgium Benemen Denmark Spain France Greece Holland Ionian Islands Labeck Mecklenburg Naplea Prussia Russia Sweden and Norway	4,845 490 170 41 216 26 1,863 965 10 8 31 11 13 4,334 136 467 11 11 109 406 337	\$59,962 89,095 16,060 9,808 20,090 9,201 460,166 249,286 3,997 1,933 5,579 1,030 24,287 557,703 20,973 80,065 20,973 80,065 12,152 106,851 24,618 165,896 87,216	4,389 447 104 444 217 36 1,612 963 10 8 81 12 213 3,376 452 111 115 344 119 417 332	497,019 43,502 15,131 5,648 19,705 5,201 474,915 364,392 1,832 5,579 1,000 24,357 558,703 20,569 77,593 11,012 102,502 25,947 187,970 85,848	9,234 857 234 455 433 3,175 20 16 16 226 6,780 919 224 715 221 833 670	1,056,874 82,597 81,191 18,856 89,855 18,409 935,981 703,592 7,294 8,566 11,158 48,714 1,116,406 41,542 187,558 18,23,964 41,542 187,558 182 23,964 205,753 50,565
Totals	13,691	2,558,279	18,336	2,607,247	27,029	5,080,526

The value of the imports into the port of Smyrna is about £2,600,000, and of the exports nearly the same.

In 1856, 1772 vessels, of 442,253 tons, arrived at Smyrna. At Sarnsoon, the imports in the same year were, in British steamers, £318,651; exports, £202,167. The imports at Rhodes by British steamers in 1857 were £129,774, and the exports to the value of £95,697. At Alexandretts, in Syria, the vessels which entered in 1856 were 196 ships, and 66,557 tons, of which 41 ships, and 13,659 tons, were British. At the Moldavian port of Galatz, on the Danube, in 1852, 628 vessels cleared, of 104,189 tons, of which 165, and 28,545 tons were British. Their cargoes were principally grain, comprising 187,555 quarters of wheat, 96,900 quarters of rye, and 329,279 quarters of maize. The value of the imports at Galatz in 1855 were £624,880, and of the exports £1,174,360.

At the port of Ibraila, 1128 ships, registering 195,418 tons, cleared in 1852, taking cargoes comprising 343,584 qrs. of wheat, 80,278 qrs. of barley, and 725,259 qrs. of maize. Of the ships, 174, of 33,775 tons, were British. The value of the imports at Ibraila in 1855 were £152,120, and of the exports £1,523,720. The declared value of British exports to Wallachia and Moldavia

averaged £150,000, and to Smyrna and Palestine £700,000.

TUSCANY. The Grand Duke Leopold having quitted the Duchy in April, 1860, owing to a popular movement, a provisional Government was formed, and the Duchy annexed to Sardinia. The population in August, 1859, was 1,806,940,

The city of Florence had 114,081 inhabitants.

The revenue is about £1,500,000. The public debt in 1856 stood at £4,162,442. The imports in 1855 were of the value of £3,006,564, and the exports of £2,323,238. The number of vessels that entered the port of Leghorn in 1856 were 4667, of these 227, and 59,593 tons, were British. The British trade with Tuscany is exports to the value of about £1,000,000, and of imports £600,000. The number of vessels belonging to the State in 1858 comprised 959, measuring 59,023 tons, of which 184 vessels, and 38,499 tons, were square-rigged, and the rest lateen-rigged.

rigged, and the rest lateen-rigged.

UNITED KINGDOM OF GREAT BRITAIN AND IRELAND.

Under the articles Balance of Trade, Colonies, Commerce, Exports.

Revenue and Expenditure, and other special heads, all the departments of

British industry, production and finance, have been noticed, it will therefore

suffice to introduce here statistics of population, &c. and later returns than were

accessible when previous sheets were sent to press.

The population of the divisions of the Kingdom may be stated as follows:-

England and Wales Scotland and British Isles	:	Census of 1851. 17,927,609 3,031,868	19,853,610 2,139,860
Ireland Army and Navy affoat -	:	6,552,386 162,490	6,090,428
		27,674,353	29.013.893

The population of the principal towns of the Kingdom, according to the census of 1851, was as follows: London, 2,362,236 (now assumed to be 3,000,000); Liverpool, 375,955; Manchester, with Salford, 401,321; Birmingham, 232,841; Leeds, 172,270; Bristol, 137,328; Sheffield, 135,310; Glasgow, 329,097; Edin-

burgh, 160,302; Dublin, 258,361; Belfast, 100,300.

The large decrease in the population of Ireland is to be ascribed to emigration. The number of electors registered in England and Wales in 1859, borough and county, was 968,692; in Scotland, 105,130; in Ireland, 200,242. Total, 1,274,264. The number of inhabited houses in 1851 was, in England and Wales, 3,278,039; Scotland, 366,650; Ireland, 1,047,735; United Kingdom, 4,692,424. The number of members returned to the House of Commons is now 654. The amount of property assessed to the property and income tax in the United Kingdom in 1857, under the three principal schedules, was nearly £267,000,000. The gross estimated rental of property assessed to the poor rate in England and Wales was £86,077,676, the rateable value as assessed being £71,840,271. The estimated rental for other parts of the kingdom has not been ascertained.

Schedules.	England and Wales.	Scotland.	Ireland.
Amount of Property Assessed to Property and Income Tax in 1857 under Schedule A - " " " B - " " D -	£	£	£
	103,496,253	12,582,749	11,915,286
	41,186,404	5,932,156	2,582,588
	73,511,927	14,109,149	4,577,874

CUSTOMS DUTY collected at the principal PORTS in 1859.

ENGLAND. London - Liverpool - Bristol - Hull - Newcastle - Plymouth - Manchester Folkestone Exeter - Sunderland Stockton - Gloucester Chester - Preston Whitehaven Shields - Grimsby - Portsmouth Yarmouth		£ 12,740,241 8,661,662 1,263,549 297,406 279,890 124,796 188,817 177,980 102,154 99,115 80,299 79,960 72,633 69,182 68,780 86,364 47,800 28,257 85,536	SCOTLAND. Glasgow - Greenock - Leith - Aberdeen - Port Glasgow - Dundse - Grangemouth Montrose - Perth - IRELAND. Dublin - Belfast - Cork - Limerick - Londonderry - Waterford - Newry - Dundalk -	£ 813,090 808,454 613,672 97,251 70,362 25,045 18,537 1,053,510 875,975 265,327 173,466 128,183 85,697 31,780 80,575 90,575
	-			

The following table, taken in connection with that given under Shipping at pages 266 and 271, furnishes the latest particulars respecting the statistics of the British colonies and possessions.

POPULATION, REVENUE, DEBT, and EXTERNAL COMMERCE of the British Colonies and Possessions beyond the seas.

British Colonies and Possessions.	Population.	Revenue.	Debt.	Imports.	Exports.	Total Ex- ports and Imports.
		. &	£	£	£	£
European Possessions.		i 1				
Heligoland	2,800	-	_	not asce	rtained	
Gibraltar	17,750	81,653	none		_	
Malta and Gozo -	140,951	142,383	Done.	2,195,114	1,528,994	3,724,108
Ionian Isles	229,736	201,276	300,000	1,323,808	972,474	2,296,252
Asiatic Possessions.	1	1 1	•			
India		81,706,776	97,851,807	31,093,065	28,278,474	59,871,539
Ceylon	1,759,528		none	3,444,889	2,328,791	5,778,680
Hong Kong	75,503		none	not asce		
Labuan	1,163	8,788	none	16,097	5,069	21,166
Straits Settlements -	252,000	not known	none	8,000,000	7,000,000	15,000,000
African Colonies.	ł	i i		1		
Mauritius and Sey-				l		
chelles	240,000	553,167	none	2,785,353	2,209,076	4,994,429
Cape Colony	267,096	494,989	868,711	2,495,341	1,798,179	4,293,520
Natal	121,068	50,905	165,000	184,549	82,497	267,046
British Kaffraria -	unknown	I ==I	_	I	I	I —
St. Helena	5,490	19,530	none	100,119	27,972	128,091
Settlements on West		l		l	1	l
Coast	195,357	58,668	none	380,955	606,945	987,900
Carried forward -	189,216,719	33,980,567	99,185,518	52,019,290	44,838,471	96,857,761

British Colonies and Possessions.	Population.	Revenue.	Debt.	Imports.	Exports.	Total Ex- ports and Imports.
Brought forward -	189,216,719	£ 33,980,567	£ 99,185,518	£ 52,019,290	£ 44,838,471	96,857,761
Hew South Wales &		1	í	1	1	
Queen's Land -	842,062	1,540,550	2,500,000	6,059,366	4,186,277	10,245,643
Victoria	504,519	8,257,724	6,250,000		13,989.209	
South Australia -	118,665	601,500	300,000	1.769,352	1.512.185	3.251.547
Western Australia -	14,776	52,804	none	144,932	78,649	223,561
Tasmania	84,080	599,524	345,260	1,329,612	1.151.609	2,480,221
New Zealand	114,867	841,635	500,000	1.141.278	458,023	1,599,206
American Colonies.			,		1,	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
British Columbia -	6,000	50,080	вове	177,219	168,000	345,219
Vancouver		not known	Belle	not asce		1,
Labrador	5,000	none	none			l .
Canada	- 2,571,437	1,985,457	11.661.010	6.549,669	5,281,337	11.894.606
New Brunswick -	193,800	106,968	206,095	1.162,771	810,779	1.973.560
Nova Scotia	276,117	300,000	200,000	1,936,176	1.393.566	2.329.742
Prince Edward	1		-14011	-,,	1 -100-100	4
Island	71,496	39,196	2000	186,229	153,071	329,200
Newfoundland -	122,638	141,128	182,500	1,172,862	1.318.536	2,491,698
Bermudas	10,982	15,803	DODA	141,203	27,210	168,413
West Indies.	,	10,000				1
Bahamas	27,619	22,126	2000	190,523	92.156	262,679
Turks Island	8,250	5.958	Dene	\$3,418	29,274	62,693
Jamaica	877.433	216,463	887,880	1.058.654	1,179,014	2.237.658
Virgin Islands -	6,053	1,389	2000	5,077	10.953	15.330
St. Kitta	20.741	23,386	Bene	161,317	187,901	249,218
Nevis	9,571	6,493	3000	36,721	45,693	82,344
Antigua and Mont-	0,011	, 400		40.00		40,500
SETTAL	42,451	43,656	45,900	284,179	842,670	696,849
Dominica -	25,230	13,529	8,000	64,543	81,906	149.449
St. Lucia	26,050	13,191	15,000	102,036	94 659	196,695
St. Vincent	30,128	20,874	none	160,948	181,934	342.882
Barbados	135,939	96,915	Bono	1.325,118	1,468,450	2,792,366
Grenada	32,671	17,660	7,000	103,165	185,613	288,778
	14,378	9,654	2,000	62,137	73.401	134,539
Tobago Trinidad	68,600	145,391	166,073	825,969	785,863	1,611,632
Honduras	29,000	27.848	none	207,908	380.378	588,296
British Guiana -	127,695	273,295	250,000	886,016		2,217,387
Falkland Islans	621	7,741	2:50,000 none	11,300	11.800	23,100
carrann mas	921	1,721	none	31,000	11,000	24,100
Total	194,648,588	43,952,376	122,679,266	94,409,232	81,851,488	176,960,730

UNITED STATES. The total population, according to the decennial census of 1860, numbered 31,374,856, classified as follows:—

Free population of the 33 States Slaves in the States Population in the Territories, including	Kansas	-	:	37,112,000 3,878,000 364,836
Census of 1850	•	•	Total	31,874,83 0 28,191, 074
Increase in 10 years Increase per annum Per centage of increase in the decade	=	:	:	8,183,782 818,378 3.5
Eight States contain more than 1,000,	000 inh	abitants 1860.	each.	These are:

•		•	•	1860.	1 1850.
New York	-	-	-	8,897,000	8,097,334
Pennsylvania	-	-	-	2,913,441	2,811,796
Ohio	-	-	-	2,283,982	1,980,329
Illinois	-	•	-	1,789,496	851,470
Virginia	-	-	-	1,658,190	1,421,661
Indiana	-	-	-	1,347,000	988,416
Massachusetta	-	-	-	1,331,499	924,514
Georgia	-	-	•	1,075,977	906, 185

Of these eight States only the fifth and last are slaveholding. During the ten years Illinois has overtaken the four States last on the list. In other

respects their relative positions are unchanged since 1850. Virginia, which in the census of 1790 occupied the first place, has gradually sunk to the fifth. The growth in population of three other north-western States is remarkable :-

					1860. (1850.
Michigan	•	-	-	-	749,969	897,654
Wisconsin	•	-	-	-	777,771	305,391
Iowa		•	. - .	• .	776,435	102,214

The cities containing a population of more than 40,000 number 21.

The area of the Free Labour States is 859,000 square miles; of the Slave States, 959,580; and of the territories in which the question of Free or Slave Labour is undetermined, 1.363,730; giving a total area for the United States of 3,182,310 square miles.

The real and personal property in the Free States is valued at Do, in the Slave States, including slaves
Do. in the Slave States, not including slaves 4,102,172,108 dollars. 2,936,081,781 dollars. 1,336,090,737 dollars.

The value of the slaves is computed for the whole slave-population at 500 dollars per head. The total number of persons holding slaves is 847,525.

The revenue of the Republic in 1858 amounted to 70,273,870 dollars, or £14,640,388; and the expenditure to 81,585,668 dollars, or £16,997,014. Customs yielded 41,789,621 dollars; sale of lands, 3,513,716 dollars; and "miscellaneous" items the large sum of 24,970,583 dollars. The items of expenditure were:—Civil list, 7,059,197 dollars; fereign intercourse, 1,391,408 dollars; Interior Department, 6,051,923 dollars; War Department, 25,485,384 dollars; Maval Department, 13,976,000 dollars; and Public Debt, 9,684,538 dollars. The Public Debt itself stood in 1858 at 44,910,778 dollars, or £9,856,412. total registered and enrolled sailing tonnage of the United States was 4,320,417. and the steam tonnage 729,890; 1225 vessels, of 242,287 tons, were built in that year; 4,395,642 tons of American shipping entered ports of the States, and 4,490,033 tons cleared out thence. The foreign tonnage exceeded 2,200,000 tons. The imports of the States in 1858 (exclusive of coin and bullion) were valued at £54,862,220, and its exports at £56,669,015. The value of the domestic produce exported figures for 251,351,033 dollars, out of the total, 272,011,274 dollars. The builton imported was £4,015,520, and that exported £10,965,239. The imports from Great Britain figure for 127,589,552 dollars, and the exports thereto for 204,049,595 dollars. The imports from France figure for 35,536,643 dollars, and the exports thereto for 33,663,793 dollars. Spain stands next; the imports thence stand at 37,729,527 dollars, and the exports thereto at 25,210,961 dollars. The exports of domestic produce from the States included in 1858:— 8,283,812 lbs. of tallow, 3,082,117 lbs. of butter, 8,098,527 lbs. of cheese, 20,954,374 lbs. of ham and bacon, 33,022,286 lbs. of lard, 8,926,196 bushels of wheat, 3,512,169 barrels of flour, 4,768,145 bushels of Indian corn, (cetton mentioned below), 5,410,225 lbs. of brown sugar, 3,784,557 lbs. of candles, 4,788,981 lbs. of soap, 2,778,414 lbs. of gunpowder, 3,714,576 lbs. of nails, 2,595,367 lbs. of leather, 1,790,895 lbs. of refined sugar, 1,000,997 gallons of grain spirits, and 3,508,071 gallons of molasses spirits, 11,247,819 lbs. of tobacco and snuff, and 2,457,255 gallons of "spirits" (oil?) of turpentine. The value of the cotton exported was 131,386,661 dollars, and the price per lb. (average) 11.70 cents. Great Britain in 1858 took 780,952,389 lbs. of cotton, and France 178,789,761 lbs. 56,491,655 pieces of money, value \$1,857,088 dollars, were coined at the Mint of the United States in 1858. There are several gold coins, called double-eagles, eagles, half-eagles, quarter-eagles, and dollars. The silver coins are chiefly dollars and fractions of dollars, dimes, half-dimes, three-cent pieces, and "fire-bars." There were, in 1858, 1422 banks and branches in the Union, with a paid-up capital of 394,622,799 dollars. Their circulation was 155,908,344 dollars, and the amount of their deposits 185,932,049 dollars. The aggregate of immediate liabilities was 392,310,268 dollars, and that of immediate means 170,293,511 dollars. In 1856 there were 25,565 post-offices, with a revenue of 7,620,822 dollars, and an expenditure of 10,405,286 dollars.

The exports of the principal staples of the United States in 1858 were as follows:—Cocton, 1,118,624,012 lbs.; rice, 68,015 tierces, value 1,870,578

dollars; tobacco, 127,670 hhds. value 17,009,767 dollars; snuff and manufactured tobacco, value 2,410,224 dollars; bread-stuffs and provisions, value 50,683,285 dollars. The following shows the aggregate value of the imports and exports for the five years ending July 1860.

				Exports.	Imports.
1856 1857 1858 1859 1860	:	• • • • • •	:	826,964,918 dollars, 362,949,144 ,, 824,644,421 ,, 856,789,462 ,, 400,122,296 ,,	814,639,942 dolları 360,890.141
· Pos	. K wa	474	_	1 771 470 941	1 650 075 304

Excess of exports over imports 112,394,937 dollars.

VALUE of IMPORTS from and EXPORTS to Foreign Countries in 1858.

	Imports.	Exports.
	Dollara.	Dollars.
United Kingdom	95,730,658	168,095,848
British Colonies and Possessions	31,887,396	85,953,747
France	35,291,521	32,741,917
Hanse Towns	14,164,486	13,212,631
Cuba	27,214,846	14,433,191
All other parts of the world -	184,579,228	92,752,138

TONNAGE of the United States, the 30th June, 1855.

TONNA	GE OI F	IG ONIT	ED STA	TES, the	SOUTH SE	ше, 18ээ	•
The registered verified verse The licensed verse	els emplo	ed in the	coasting	trade	· consting	2,491,108	Tons. 2,535,126
trade	•	•	•		•	52,147	2,543,255
The enrolled vess The enrolled vess The enrolled vess	els employ	ed in the	mackere whale fis	l fishery hery	•	102,927 21,634 71	
The licensed vess	els under	twenty to	ns emplo	yed in the	cod fabe	ey 8,967	133,609
•	Total .	:	•	:		•	5,212,000
The registered to The registered to	nnage em	ployed in ployed ot	the whale her than	e fishery in the wh	alo flahery	<i>.</i> .	186,778 2,348,356
•	Total .	•	•		•		2,535,136
The aggregate an June, 1855 Whereof		ne tonnag	e of the l	Juited Sta	tes on the	80th	5,212,000
Permanent regist Temporary regist	ered tonn		•	•	·	1,957,796 577,430	
Permanent enroll Temporary enroll	Fotal regis ed tonnag ed tonnag	8	mage	·. •	•	2,602,499 13,231	2,525,226
Licensed tonnage Total licensed ton	Fotal enro under two mage und	enty tons	employe	d in the o	od flahery	. 8,987	2,615,7 30 61,044
Of the enrolled ar	Total .	I tonnage	there we	re emplo	red on the		5,212,000
Coasting trade				•	•	' •	2,491,108
Cod fishery Mackerel fishery	٠		•			. •	102,927 21,634
Whale fishery			•	•	•	•	70
7	Fotal	٠	•	:	•		2,615,730

Of the registered tonnage, amounting, as above stated, to 2,535,136, there were employed in steam navigation

Of the enrolled tonnage, amounting, as above stated, to 2,618,780, there were employed in steam navigation

655,239

Total steam tonnage

770.284

The total tonnage seems rather to have decreased than increased. In 1858 the aggregate tonnage was 5,049,807 tons, of which 2,361,595 tons was employed in the coasting trade.

POPULATION of the Eighteen FREE STATES, according to the latest accounts, and their DEBT as returned on the 1st January, 1859.

			Population.	Debt—Dollars
California	•		507.067	4,048,486
Connecticus	-	-	870,792	65,000
Illinois	-	-	1,789,496	11, 188, 454
Indiana	-	-	1,347,000	9,241,529
Iowa	-	-	776,435	128,010
Maine	-	-	583,169	1,034,277
Massachusetts	-	-	1,831,499	6,313,456
Michigan	-	-	749,969	2,337,630
Minnesota	-	-	150,042	250,000
New Hampshire	-	-	317,976	none
New York	-	-	8,827,000	82,441,944
New Jersey	-	-	489,555	95,000
Ohio	-	-	2,283,982	17,131,219
Oregon	-	-	48,000	none
Pennsylvania	-	-	2,913,441	89,268,111
Rhode Island	•	-	147,545	386,311
Vermont	-	-	314,120	none
Wisconsin	-	_	777,771	100,000

The population of the Territories a few years ago was as follows:—Utah, 11,380; New Mexico, 61,547; Washington, 10,000; Kansas, 75,000; Nebraska, 10,716; Arizona, 10,000; Dacotah, 8000; Jefferson and Nevada, not stated. Kansas was in 1861 admitted into the Union as a Free State.

According to the census of 1860, the details of which are not yet published, the aggregate population of these Territories was 384,856.

POPULATION AND DEBT of the Fifteen SLAVE STATES.

States.	States.		Debt.—Dollars.
Alabama - Arkansas - Delaware - Florida - Georgia - Kentucky - Louisiana - Maryland - Mississippi - Missouri - North Carolina South Carolina Tennessee -		841,704 831,213 91,532 110 838 1,075,977 982,405 646,971 583,034 606,536 682,044 869,039 668,507	5,098,000 2,981,133 none 158,000 8,854,750 5,479,244 10,701,642 14,864,204 7,271,707 19,038,000 7,181,923 6,192,743 16,643,607
Texas - Virginia - District of Columbia	:	212,592 1,658,190 51,687	33,005.159 none

In the year ending June 30, 1859, the value of the exports of the six principal Southern States, South Carolina, Georgia, Alabama, Florida, Louisiana, and

Texas was 171,184,265 dollars, or seven times as large as the exports of the six New England States.

PROGRESS of the EXPORTS and IMPORTS of the UNITED STATES for Eighteen Years.

Value in Dollars.

Exports, American Produce.	Total Exports.	Imports.
92,969,998	104.691.534	100,162,087
	84.346.480*	64,788,799*
	111,200,046	108,435,035
		117.254.564
		121.691.797
		146,545,638
		154,998,928
		147,857,439
		178,138,318
	218 298 011	¥16,924,933
		212,945,443
		267,978,647
		204.562.281
		261.468.520
		814,689,943
		360,890,141
		282,613,150
220,100,213		838,768,130
	American Produce. 92,963,996 977,798,768 99,715,179 99,299,776 102,141,993 130,687,464 132,904,191 132,668,965 134,946,912 196,638,718 192,868,964 211,417,697 255,047,906 246,708,553 310,868,563 238,985,663 238,758,879	American Produce. 92,963,996 97,798,768 99,715,179 99,299,776 114,646,606 102,441,993 118,488,616 120,648,622 132,904,191 132,664,965 136,946,912 161,698,718 192,688,964 213,417,697 256,047,606 218,447,697 246,708,563 210,688,380 213,686,386 210,688,380

^{*} Only nine months of 1843.

The Progress in Population and Commerce of the PRINCIPAL PORTS will be seen from the following details:—

Boston. The population of this city, which in 1850 was 136,881, was returned in 1860 at 177,902. The great increase of ocean traffic by the Cunard steamers, and the Indian trade, have greatly improved the commerce of the port. In 1840-41 there were exported from Calcutta to the United States, in 21 small ships, about 1700 tons of goods, of which the first cost and freight did not exceed 1,256,000 dollars, while in the year 1856 there arrived in the United States from Calcutta 93 ships, many of them upwards of 2000 tons burden, bringing 132,635 tons of goods, of which the freight alone, at a fair average rate of 14 dollars per ton, was 1,850,000 dollars, and the first cost in Calcutta 75 dollars per ton, would make an aggregate of more than 10,000,000 dollars. Shipbuilding and the prosecution of the fisheries are much carried on from Boston. In 1850 the foreign arrivals at Boston numbered 3000 vessels, the imports were valued at 30,000,000 dollars; the exports at 9,400,000 dollars, and the real and personal estate of the city at 180,000,000 dollars. In 1856, the total value of the exports from Boston was £5,78,622, of which £2,932,\$51 were shipped in foreign vessels. The value of the imports in the same year was £8,602,980, of which more than one-third was from Great Britain.

New York. The population of the city of New York increased between 1850 and 1860 from 515,647 souls to 814,277. The appended statistics present the latest returns of the shipping trade of the port.

The number of American vessels entered during 1859 was 2586, and the amount of tounage 1,302,024,—whilst during the same period 1319 foreign vessels entered, with a tonnage of 597,826. The following table shows the comparative entries of American and foreign ships at this port during ten years:—

d at New York from Engelen Ports

		1	Arrivals.	American Tonnage.	Foreign Tonnage.	Total Tonnage
1620		. :	8343	807,580	441,786	1,249,884
1851	-	-	2640	1,144,565	479,556	1.624.65
1852	-	_ '	8837	1.231.651	478,037	1,709,98
1853	-	•	4079	1.821,674	491,580	1,813,25
1854			4047	1.422.262	477,084	1,919,410
1855	-	-	8391	1.340.257	220,000	1,562,25
1856	-	-	8861	1,684,596	866,262	2,070,85
1857	-	-	8851	1,478,579	492,425	1,971,00
1858		•	8421	1,260,043	483,828	1,693,87
1859	-	-	2905	1,302,034	897,896	1,899,65

In comparing the tonnage of 1859 with an average of the nine previous years, an comparing the connage of 1859 with an average of the nine previous years, we find the increase in the tonnage of American entries to be only 4½ per cent. whilst the increase of foreign is in the ratio of 38 per cent. The number of vessels cleared at New York during 1859 was 3253, including 981,619 of American tonnage, and 602,569 of foreign. The following is a comparative statement of the total American and foreign vessels cleared at New York for foreign ports from the year 1852 to 1859 inclusive:—

ne.			1	No. of Vessels.	Tonnage.	
		-	2035	1,855,818		
1853	-	•	-	3469	1,521,286	
1854	-	•	-	3278	1,528,104	
1855		-		8095	1,426,201	
1856	-	•	-	2004	1,709,738	
1857	-	•	•	2917	1,622,707	
1858	-	-	-	2851	1,380,295	
1859	_	_	_	2953	1,584 188	

The returns for the coasting trade show a larger amount of tonnage entered in 1859 than during any previous year excepting 1855, when the amount entered was 614,045 tons against 572,232 tons in 1859. The coastwise clearances, however, are the largest of any period.

We append the following summary of the official returns of the domestic trade during the last ten years :-

	Entered Coastwiss. No. of Vessels.	Tons.	No. of Vessels.	Cleared Coastwise. Tons.	
1850	1928	489,395	4719	1,020,070	
1851	1768	455,542	4803	1,214,943	
1852	1766	497.840	4680	1,173,769	
1853	1 1783 1	507.531	4789	1.310,697	
1854	1880	543,452	4779	1,499,969	
1855	1986	614.045	4968	1,378,588	
1856	1669	\$3 9,461	4696	1.482.310	
1857	1569	503,679	4182	1,425,810	
1858	1559	499,138	4381	1,640,478	
1859	1838	572,232	4098	1,726,993	

This return must necessarily be imperfect, owing to the incompleteness of the

system by which it has been obtained.

The law passed by Congress for ensuring a systematic return of the coasting trade, remains comparatively a dead letter; it is to be trusted, however, that for the interests of commerce, the proper authorities will enforce its strict execution.

Philadelphia. The population of this city which in 1850 was 408,762, is now 8,034. There are in this State 1300 miles of canal. Its coal production has been greatly on the increase.

Baltimore. The present population of this city is 214,037. The amount of the tonnage of the port in 1850 was 76,022; vessels of 500 or 600 tons can lie at the wharves near Fell's Point, and those of 200 tons can go up to the town in the

inner harbours. The commerce is great, for which it enjoys peculiar facilities.

Charleston. The population of this city in 1860 was 40,194, showing a decline of about 3000 souls since the last decennial census. The commerce of Charleston is extensive.

Savannah. The population of this city is about 30,000. It has a good harbour. Vessels drawing only 14 feet of water can come up to the city wharves, but larger vessels lie at Fathom Hole, 3 miles below. Many stemmers of a large size navigate the river.

Mobile. The population is about 30,000. The value of the cargoes cleared in British ships from this port (chiefly cotton) averages from £1,500,000 to £2,000,000. The British imports are small, only reaching £90,000. In 1856, 84 British vessels of an average tonnage of over 1000 tons entered Mobile, and 85 cleared. American vessels import goods to about £166,000, and take away produce worth £2,000,000 to £3,000,000. Cotton, sawed timber, and naval stores are the chief exports.

stores are the chief exports.

New Orleans. The population of this city has increased from 116,375 souls in 1850 to 170,766 in 1860. The clearances from the port during the year anding October 1857 were 2185 vessels, measuring 1,117,409 tons. The value of the produce received at the port, from the interior, was £33,000,000. The

total value of the foreign imports in the year ending December 1857 was £5,288,068, and of the exports, £23,957,044 sterling.

The corporation have farmed out to contractors the right to collect dues from ships, vessels and steam boats, called levee or wharfage dues, as follows:-20 cents per ton for every vessel of 1000 tons and under, and for any excess of tonnage 15 cents per ton; thus, a vessel of 500 tons pays 100 dollars, while one of 1200 tons pays 230 dollars. On all steam ships navigating the Gulf of Mexico the rate is 15 cents per ton. These dues are higher than in any other city in the United States, and when the heavy expense of pilotage and towage from the bar is included, are extremely onerous and oppressive to the shipping interest. The pilotage charged, which is exacted whether the ship takes a pilot or not, is 3½ dollars per each foot of water the vessel draws, so that a vessel drawing 18 feet pays 63 dollars or £13. 2s 6d. The towage of a vessel from the bar to the city, of 500 tons, is 370 dollars; of 1000 tons, 643 dollars; of 1500 tons, 950 dollars; and for every 25 tons additional, 25 dollars more. The towage from the city to the bar is on an average about one-half less than the rate for towing vessels from sea. Besides these dues there are harbour masters and port warden's fees, the former of 3 cents per ton, and the latter 5 dollars per vessel, whether called upon to inspect vessels or not. The Board of Health is also authorized by an Act of the Legislature to charge a fee of 20 dollars for every ship, barque or sea-going steamer entering the river, and the sum of 150 dollars for all other vessels.

URUGUAY. The area of this republic now embraces a territory of 102,900 square miles, and a population of 177,300 souls, spread over the following departments :-

Departments.							Population.
Monte Video .							43,520
Guadaloupe							13,G00
San Jose		•					12,500
Colonia del Sacramento .	-		-		-		10,320
Soriano .		•		•			13,200
Paysandu, Salto, Tacuarembo	•	•	•	_	-		84,560
Carro Largo .				•		•	10,100
Maldonado and Minas	•	_	-		•		21,900
Florida .		•		•	•	٠	9,400
Between II and Rio Negro	•		•		•		8,200
		-		-		-	
		т	otal				177.800

The value of the exports from Monte Video was in 1856, £906,197; in 1857, £1,830,269; and in 1858, £1,152,892. They consisted in 1858 chiefly of the following:—184,389 quintals of salted beef, 10,338 tons of bone and bone ash, 1,459,000 shin bones, 82,720 arrobas (of 25 lbs.) of flour, 76,290 arrobas of grease, 40,570 quintals of horse and cow hair, 457,879 ox hides, 186,803 horse hides, 389,700 horns, 1254 dozen of sheep skins, 86,266 arrobas of tallow, 121,592

arrobas of wool, 42,720 fanegas of wheat, and 142 mules.

The value of the exports from Monte Video to Great Britain and her colonies in 1857 was £551,791. The entries of vessels at Monte Video have risen from 518 and 107,586 tons in 1852, to 936 and 186,699 tons in 1858. The entries show that 84 British vessels of 23,221 tons were employed in the direct and indirect trade at the port of Monte Video in 1858.

Since the end of the siege of Monte Video in 1851, land has increased in value about 75 per cent., and is in great demand. The number of cattle then existing in the Republic was considered to be from 1,500,000 to 1,800,000, and to be worth on an average 35s each. In 1857 they were calculated at 4,000,000, and worth 70s each. Great attention has lately been paid to the rearing of sheep, for which the country is well adapted, and large numbers were imported during 1856 and 1857 from Buenos Ayres, it being considered that the pasturage is better than in that province, and the land drier and yet better watered, and not so subject to droughts. There can be no doubt that the produce of wool will soon be much increased.

USURY. By the 17 and 18 Vict. c. 90, all the statutes in England, Scotland, and Ireland, about twenty in number, relating to usury, were repealed.

VALONIA. The imports of this tanning substance are now very large. Under the article LEATHER, in the Supplement, some details as to imports and range of prices have been given. The Board of Trade returns show that the aggregate imports for 1859 reached 27,579 tons, of the computed real value of £397,054. The Turkish valonia being estimated at £14. 11s 5d, and the other kinds at £11. per ton.

VANCOUVER. A British Colony on the North-West Coast of America, containing 11,570 square miles, and including the island of that name, and the small surrounding islands in the Gulf of Georgia Channel and Atlantic side. The chief town is Victoria, on the south-western extremity. This island was formerly leased to the Hudson's Bay Company, but resumed by the Crown in 1857. The possession of this island to Great Britain is of vast importance politically and commercially. There is not a safe harbour, nor a spot adapted for a commercial port, between San Francisco and this island. Humboldt Bay is capacious, and vessels can lie with tolerable safety when once in, but it is

inaccessible in heavy weather, and is difficult of exit.

Vancouver island is situated between lat. 48° 2° and 51° N. and long. 123° and 128° W. Length, N.W. to S.E. 300 miles; greatest breadth, 75 miles. There are said to be 15,000 or 16,000 Indians on the island. The surface is mountainous and richly wooded. On its west coast are Nootka Sound and many other harbours. The island is intersected by high mountain ranges, but it has notwithstanding a considerable extent of level and undulating land susceptible of cultivation. The growth of timber is most luxuriant. Pine, spruce, white and red oak, ash, cedar, maple, etc., are found in the utmost profusion—the cedar and pine attaining to an immense size. It is said that the humidity of this climate will prevent this island from ever becoming a wool-growing country, but though it may not produce fine, it would produce coarse wool, and there can be no doubt of its being well fitted, from the luxuriance of its pastures, for the rowth and rearing of cattle. There are some very fine pure Southdowns. growth and rearing of cattle. There are some very mine pand boundary.

Other breeds—hybrids of Southdowns, merinos, and other stock—are also in good condition and fair size. Black cattle do well also. The breed is a mixture of English and American, which makes very good beef. The horses are truck all very clean little Indian breeds, and some crosses with American stock, all very clean limbed, sound, active, hardy and full of endurance and high spirit. The bays, rivers, and adjacent seas swarm with salmon, sturgeon, herrings, seals, sea-otters,

and tortoises, and they are also resorted to by whales. The harbours of the island are, consequently, well fitted for carrying on an extensive and profitable fishery, and also well suited to ship building. The mineral riches have been very imperfectly explored. Enough, however, is known to establish the fact that immense beds of coal are to be met with in the N.E. parts. In various localities

the beds have been found cropping out on the surface, and large supplies have been found with but little difficulty and little expense.

The seat of Government is at Victoria, a regularly laid out town, containing about 2000 inhabitants. The harbour of Victoria is small, with a depth of only about eight feet water, but at the town of Esquimanh, three miles N.W., there

is a most commedieus harbour.

VAN DIEMEN'S LAND, see TASMANIA.

VANILLA. The imports of this aromatic pod into the United Kingdom in the four years ending 1859, averaged 5000 lbs. per annum, but the supply and price fluctuate considerably. There is a large consumption on the Continent, and the United States use about 5000 lbs. per annum. The cultivation is now successfully carried on in Bourbon and Mauritius.

VEGETABLE WAX. Large quantities of solid vegetable oils are now received from various countries, under the names of vegetable wax and vegetable tallow. The principal of those known are the Carnauba wax imported from Brazil, which is the produce of Coperation confers; myrtheberry wax, the produce of some species of Myrica in South Africa and North America, the Japan vegetable wax obtained from the fruit of Rhus succedensum; the Borneo

vegetable tallow; several of the Bassia butters and other kinds. In 1857, 746 cwts. of vegetable wax, valued at £3170 was imported; in 1858, 2081 cwts. of the value of £8823., and in 1859, 31,547 cwts. of the value of £110,406. Since the opening of trade with Japan large quantities of vegetable

wax have come forward from that country.

VENEZUELA. The population of this little Republic, according to the latest returns was 1,564,433, and of the capital, Caraccas, 50,000. The area is stated to be 426,712 square miles. The foreign debt of Venesucla in 1859, including arrears of dividends, was £4,198,225. The State has also a home debt amounting to about £5,000,000, part of which represents the value of the slaves which were emancipated, their owners having been paid in bonds. The value of the imports of the republic in 1856 was £1,119,426, and of the exports £1,327,220. The Customs duties received £381,299.

La Guayra. The official value of the imports at this the principal port, in 1857, amounted to £671,253, of which £112,612 was from Great Britain. value of the exports was £595,600, of which but £21,470 went to Great Britain. The principal exports from La Guayra in 1857, were cocoa, 4,309,007 lbs.; coffee, 16,030,567 lbs.; cotton, 345,438 lbs.; hides, 67,080 in number;

indigo, 88,785 lbs., and tobacco, 413,290 lbs.

Belivar. At this port on the Orinoco the value of the imports in 1857 was £126,236, and of the exports, £116,847. Nearly all the merchants here are Germans, and a large amount of trade is carried on with the Hanse Towns of Bremen and Hamburgh. British vessels are employed in carrying cattle to the West India Islands. The amount of the direct trade with Venezuela is small. The imports have been declining of late years from £47,000 in 1855 to £21,000 in 1859. The value of British manufactures has fluctuated but little, averaging about £320,000 per annum.

The following figures show the extent of the shipping trade at each post:-Bolivar and other ports on the Orinoco, in 1857, 179 vessels, 17,694 tons; of these 61 vessels of 4900 tons were engaged in the direct trade with the United Kingdom. At Puerto Cabello in 1857, 135 vessels of 29,969 tons, and with £246,737 in cargo entered, of which 21 vessels of 5386 tons, and with £93,273 in cargo were from Great Britain. At La Guayra, 230 vessels of 37,918 tons, and cargoes valued at £671,253 entered, of which 15 vessels and 3615 tons were British. The United States and European countries carry on the largest trade.

VICTORIA. The rapid strides made by this colony in wealth and population are mainly due to the gold discoveries of 1851. In 1850 it was detached from New South Wales, of which it was previously a portion, and constituted an independent colony under the title of Victoria. In 1855 it received a representative constitution. In 1846 Melbourne, the capital, was only an embryo town, with a population of 10,954, now it is a well-arranged municipality, with a population of 125,000. The yield of gold in Victoria between 1851 and 1859 is estimated at more than 25,000,000 owness, worth about £100,000,000.

See the articles Bullion and Gold.

In 1835 the first settlement was made in Victoria, whence, up to 1851, the population went on increasing gradually until it reached 77,345 souls in a period of 16 years; but from that date to 1860, it jumped, it may be said, to 530,000 The revenue, which in 1851 was only £316,532, derived from all sources, was £3,308,589 in 1857; of which latter sum, £1,595,283 was derived from receipts at the Custom House, inclusive of gold export duty. The expenditure in 1851 was £409,498, consequently in excess of receipts by nearly £100,000; but increased population required greatly increased expenditure, and unavoidable outlays for roads, bridges, and other public works, and the expenditure in 1859 was £3,662,540. The number of vessels employed in carrying on the expens and import trade of the colony has increased 208 per cent. since 1851, when there were 710 ships entered inwards at the Custom House at Melbourne, but 2190 in 1857; the tonnage has advanced between the same dates 438 per cent. from 128,959 to 694,564 tons; and the hands employed 349 per cent., from 7735 to 34,777 men. The exports in 1851 were declared at the value of £1,422,909, but at £15,079,512 in 1857. The imports in 1851 gave a total value of £1,056,439, but in 1857 they were returned at £17,256,209, the greater proportion of which were from the mother country. In reference to public works, the statistics show that in 1851 there was not a single mile of macadamised road made beyond the towns of Melbourne and Geelong; but at the close of 1857 there were 470 miles of road formed, 270 of which were macadamised; 300 bridges erected, and many miles of viaducts constructed, at a cost altogether of £4,821,848; and without reference to outlays to a considerable extent by district road boards. Two lines of railway have been constructed by private companies. The first from Melbourne to Hobson's Bay, with a branch to St. Kilda, at a cost of £365,240, inclusive of rolling stock, on which the profits are about 19 per cent., and after deducting expenses and adding to the reserve fund, leave 14 per cent. per annum to the shareholders. The other line is that of Geelong and Melbourne, 42 miles, constructed as a cost of £590,576. Two trunk lines are to be constructed by the Government. Of communications by electric agency, no less than 701 miles have been established in the colony, at a cost of £70,000. There are 22 stations, at the annual expense of £18,000. The total extent of land under culture in 1859 was 297,056 acres. In 1851, there were only six banks, and now there are 54, the paid-up capital of which is £5,423,694.

The numbers of live stock in the colony in March, 1859, were 68,323 horses, 699,330 cattle, and 5,578,413 sheep. The imports of flour in 1858 amounted to 26,276 tons, valued at £524,529. In 1857 the exports of wool amounted to 17,176,920 lbs., valued at £1,334,642, and in 1858 to 21,515,658 lbs., valued at £1,678,290.

£1,678,290.

The value of the imports into the colony in 1858 was 15,108,249, and of the exports £13,989,209, of which £10,107,836 was gold. The direct trade with the United Kingdom has been as follows:—

			Imports from.	Exports to.
1865	•	•	£1,798,790 1	£3,245,788
1856	-	-	2,033,654	6,517,745
1857	•	•	2.472.479	7.511.110
1856	•	-	2,110,277	6,080,844
1859	•		2,427,820	7,176,448
1860	-		-,,	5,878,968

The imports are exclusive of gold.

VINEGAR. The home manufacture of vinegar was estimated a few years ago at only 2,000,000 gallons, besides 1,250,000 gallons of acetic and pyroligneous acids. This would however be a low estimate, seeing that the production when charged with duty twenty years ago, was 3,000,000 gallons. We imported in 1859, 64,436 gallons of foreign vinegar, chiefly from France. Vinegar manufacturers pay a license duty of £5. 5t. The number of vinegar makers in the United Kingdom in 1859 was 66, namely 58 in England and Wales, 7 in Scotland, and 1 in Ireland. In 1849 the number was only 58.

WATCH. According to the census returns of 1851, there were in London, including every dealer who professed and called himself a watchmaker, about 4,800 persons in the trade. The manufacture is divided into a great many separate branches. Thus, according to the Post-office Directory, there are the following persons engaged:—862 watch makers, 53 watch case makers, 32 watch secret springers, 37 watch escapement makers, besides 250 other workmen. This was quite exclusive of the workmen, including only those who had business

residences and worked on their own account.

The number of gold and silver watch cases assayed and marked at the Assay Office of the Goldsmith's Company, is by far the chief proportion of the whole made. The cases are marked, but are not subject to duty; they weigh on the average about one ounce. The first column of the appended table shows the number for London in each of the years (ending 30th April), and this, if subtracted from the total, will give the number marked at the other Assay offices in Birmingham and Chester.

	Gold Wa	tch Cases.	Silver Watch Cases.		
	London.	Total.	London.	Total.	
1848	14,257	16,839	78,071	120,017	
1849	15,167	17,237	63,079	108,538	
1850	16,877	19.835	62,076	107.096	
1851	18,629	24,834	64.709	117,045	
1852	20,101	27,197	66,561	117,196	
1858	21,533	28.463	78,139	127.922	
1684	23,561	33,119	83,466	132,617	
1855	20,817	28,512	90,062	138,893	
1856	22,931	84,454	96,261	145,156	
1857	26,796	40,708	106,860	155,339	
1858	24.870		83,614	-	
1859	24,556	_	78,416	-	
1860	26,966	-	90,320	_	

In 1852 and 1853 the enormous demand for expensive watches in Australia was one of the peculiarities of the export trade. Clerkenwell could not produce them fast enough.

At present the watch trade of the world is principally in the hands of the Swiss. Besides the enormous number of watches manufactured in Geneva, not less than 1,500,000 are annually made in the neighbourhood of Neufethatel alone, while, according to the Goldsmiths' Hall returns, the number annually manufactured in England does not exceed 196,000, not enough for the use of the people here. In addition to whatever number were smuggled into the country, duty was paid in 1853 on 42,486 watches; in 1854, on 79,209; in 1855, on 90,670; in 1856, on 84,881; in 1857, on 79,991; in 1858, on 88,710; and in 1859, on 105,817.

WAX. The commerce in beeswax is more extensive than is generally supposed, although it has been interfered with to some extent of late years by the stearines and solid vegetable oils, which come into use for many purposes for which beeswax was formerly employed. The quantity of wax produced in this country it is impossible to estimate precisely, but Sir Richard Phillips, in his Dictionary of Arts, assumed the number of bees in Great Britain and Ireland as sufficient to produce upwards of 1300 tons of wax annually, besides 5000 tons of honey. The imports of wax bleached and unbleached were, in 1858, 11,643

cwts., of which 3284 were re-exported; and in 1859, 10,762 cwts., of which 3045 cwts. were exported. The bleached wax, 1839 cwts., was worth £10.10s per cwt.; the unbleached, £8.7s per cwt. The bulk of the beeswax received comes from Morocco, Western Africa, and British India.—See Vegetable Wax

WESTERN AUSTRALIA. This isolated Australian colony, as compared with the other settlements, has made very slow progress. In 1850 it was with the consent of the colonists made a penal settlement, and since that period 5250 men have been transported there. The population in 1857 was 13,601 souls. The revenue averages £45,000. 117 vessels of 59,822 tons entered the colony. The value of the imports averages £100,000, and the exports in 1857 were to the value of £60,000. 18,000 acres of land were under crop, of which 11,000 were under wheat. The live-stock numbered 7214 horses, 26,297 cattle, and 198,386 sheep. There were 8 copper-mines worked, and 4 lead mines, the ore from which was valued at £18,000. The wool shipped in 1857 was valued at £36,000, and the timber at £12,000.

WEST INDIES (BRITISH). The progress of most of the West India colonies has been materially interfered with by the deficiency of labour, the emancipated negro not caring to give continuous labour. Hence British Guiana, Trinidad, Jamaica, and other colonies, have imported Indian and Chinese labourers. Barbados and some other densely populated colonies have not, however, suffered from any deficiency of labour. There are a few local banks in Jamaica and British Guiana, but the Colonial Bank of London conducts the principal exchange operations with the West Indies. This institution, with a paid-up capital of £500,000, has lately greatly improved its position, and paid larger dividends. The latest population returns for the West India colonies will be found under the article United Kingdom at page 307 of this Supplement.

The following table shows the total quantities of the leading articles exported in 1851 from the different islands, to which for the sake of comparison, we

The following table shows the total quantities of the leading articles exported in 1851 from the different islands; to which, for the sake of comparison, we have added the quantities brought from British Guiana, in continuation of the table at page 666.

1851.	Sugar.	Rum.	Coffee.
	Cwts.	Gallons.	Ibs.
Jamaica	485,744	1,660,884	5,591,335
Barbados	600,000	1,700	
St. Vincent	160,000	219,330	1,272
St. Lucia	67,502	45,058	18,620
Grenada	120,000	400,000	19,781
Tobago -	59,000	123,000	423
Trinidad	400,000	42,120	78,686
Antigus	265,000	16,296	198
St. Kitts	6,000	63,942	1
Dominica	62,168	80,927	792
Nevia	24,000	18,030	
Montserrat	12,234	4.788	l
Tortola	3,000	6.866	i
British Guiana -	784,810	1,339,212	17,538
Total	3,048,958	8,942,013	5,781,640

The value of the exports of British produce and manufactures to our West India colonies and British Guiana averages £1,250,000 per annum; and the imports £5,500,000 to £6,500,000. The articles imported from the British West India Islands in 1859 comprised the following: 125,535 lbs. of aloes, 16,210 cwts. of arrow-root, 4,211,185 lbs. of cocoa, 2,571,549 lbs. of coffee, 1452 cwts. of cotton, 1662 tons of fustic, 8614 tons of logwood, and 125 tons of mahogany; 4811 cwts. of ginger, 2471 cwts. of hides, 1,084,082 cocoa-nuts, 15,280 cwts. of pimento from Jamaica, 4,522 lbs. of sarsaparilla, 2,891,772 gallons of rum, 207,450 lbs. of sponge from the Bahamas, 2,331,035 cwts. of sugar, 206,879 cwts. of molasses, 194,500 lbs. of tamarinds, 4888 lbs. of tortoise-shell.

IMPORTS Of STAPLE PRODUCTS into the United Kingdom from the BRITISH WEST INDIA ISLANDS and BRITISH GUIANA in 1859.

1	859.		. Sugar.	Rum.	Coffee.	Cotton.
			Cwts.	Galla.	Lbe.	Lbs.
Jamaica -	•		428,926	1,625,564	2,230,913	8,064
Barbados -	•	•	\$91.871	74,479	45	16,352
St. Vincent	_		124,475	202,641		41,440
St. Lucia -	-		89,647	8,686	910	
Grenada -	_	-	94,069	193,983	313	62,166
Tobago -		-	56,501	185,041	_	
Trinidad -	_	-	538,152	255.702	49,335	29,008
Antigua -	-	-	196,701	120,059	76	
St. Kitta -			116,663	133,211	161	4,592
Dominica -	_	-	69,550	83,360	1,229	7
Nevis -	-	_	83,419	19,306		
Montaerrat	_	_	3,376	1,188	1	,
Tortola -		_			179,667)
Bahamas -	_	_	l 191	_		,
Demerara		_	786,700	2,972,592	919	429,632
Berbice -	_	-	59.964	49,510	841	,,
Deroice -				25,020		
	Total		3,127,705	5,913,874	2,578,309	592,256

WEST INDIA ISLANDS (FOREIGN). Several of these islands have been already noticed in separate articles, such as the Spanish colonies of Cura and Porto Rico.

FERNCH COLORIES. Guadaloups. The extent of this island and its dependencies is about 138,000 hectares. The population in 1858 was 131,567 souls. The value of the importations in 1856 was 23,671,375 francs, and of the exports 15,147,176 francs. In that year 21,600,000 kilogrammes of sugar and 886,281 litres of rum were shipped to France. The total value of the produce received from the island was 20,000,000 francs. The exports in 1860 were 57,600 hhds. of sugar, 51,432 litres of molasses, 1,272,062 litres of rum and tails, 248,718 kilos of coffee, 20,977 kilos of cotton, 59,138 kilos of cocos, 482,095 of logwood, and 132,600 kilos of annotta.

Martinique. The population is 136,460 inhabitants, area 98,782 hectares. The aggregate value of the external commerce in 1856 was 44,000,000 france, of which 20,000,000 was exports. The shipments of sugar to France were 26,636,123 kilogrammes, and of rum 2,781,627 litres, 444,546 kilos of cocos, and 19,260 kilos of coffee, besides hides, and small quantities of indigo, annotta, dyewoods, and cigars. The actual value of the colonial imports to France is stated at nearly 28,000,000 francs. The exports from Martinique in 1860 were 65,909 hogsheads of sugar, 73,176 libres of molasses, 4,942,745 libres of rum and tafia, 54,848 of coffee, 223,226 of cocoa, 191,636 of cassia bark, and 218,118 of

logwood.

The commerce of French Guians, imports and exports, is only to the value of 8,000,000 francs.

The value of the imports into Holland from Curacoa DUTCH COLONIES. and its dependencies in 1857 was 375,771 florins, and of the exports thereto 414,966 florins. The revenue was 257,039 florins, and the expenditure 646,735 florins. The external trade of Surinam with Holland is to the value of 5,750,000 florins. The revenue of the colony 1,000,000 florins, and the expenditure 1,400,000 florins. Our imports thence are only to the value of £7000 or £8000. Danish Colonies. The population of St. Croix in 1855 was 22,862, of St. Thomas 12,360, and of St. John 1715. The computed net value of the imports

into the United Kingdom from these islands in 1859 was £124,822.

The value of the exports of British produce and manufactures in 1859, was

Danish West Indies -	•	£652,995
Dutch West Indies and Guiana	-	40,344
French West Indies and Guiana	-	4,895
Spanish West Indies	-	1,675,596
•		£2.373.067

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WHALE. The average number of whales killed yearly by British vessels in the Northern fisheries from 1815 to 1834 was 1024; from 1835 to 1843, 135; from 1844 to 1848, 157, and from 1849 to 1858, 110. The total number of whales killed in those 43 years must have been nearly 24,000. At least 20 or 30 whales are also killed yearly in the shore fisheries, in the West Indies, Australia, New Zealand, &c. Computing from the quantity of oil imported, the Americans must have killed, between 1841 and 1856, 51,000 whales.

We have gradually given up our whale fisheries to the Americans; for while thirty or forty years ago we employed between 200 and 300 ships in that trade, the outfit now scarcely amounts to fifty in the year. This abstraction may be attributed to several causes. Firstly, the old cruising grounds in Baffin's Bay and the East Coast of Greenland are pretty well exhausted; secondly, the seasons have been lately very severe and unfavourable for prosecuting the enter-prise; and thirdly, there has been a more active demand for tonnage for all the purposes of transport and the carrying trade. The wages of seamen and all the

necessary expenses attending the outfit of ships, have also greatly increased.

Hull formerly took the lead in whaling. In 1830, of 91 vessels fitted out in British ports, 33 of 11,000 tons hailed from Hull, 13 from Peterhead, 10 from Aberdeen, and 9 from Dundee. The number of Hull-ships engaged in the Northern whale fishery in 1852 was 14, employing 616 men; the total take was 6001 tons of oil, and 30 tons of bone. The value of the two, estimating the oil at the average price of £30 per ton, and of bone at £200 would be £24,015.

It appears that during the period between 1772 and 1859 Hull had benefited to the extent of nearly 74 millions by the whaling trade, and that upwards of 2000 ships had been at different times sent out. Yet of all enterprises, none can be conceived more venturous or fluc asting. The greatest variations have been experienced. In 1818 and 1819, 64 ships were despatched to the fisheries; in 1837 and for several years afterwards, but 1. In 1884, out of 8 ships sent out, to ware lost; in 1818, when 64 ships were sent, only 1 was lost. In 1820, the value of the produce was £319,000; in 1837, £150. In like manner has the value of bone and oil fluctuated. The price of the former was as high as £55 per ton in 1815; in 1806 it was £20. The price of bone has varied even more remarkably. At one time the Dutch were paid by us as much as £700 per ton for it. From 1763 to 1780 it was worth about £500 per ton; in 1804 and 1805, it was only worth about £25 per ton, at which it barely paid for cleaning. Even in later years the fluctuation has been more remarkable. £225 was the current figure in 1853, £240 in 1854, £265 in 1855, £300 in 1856, £420 in 1857, £550 in 1858, and £410 in 1859. And yet, notwithstanding all the hazards of the voyage, the variable chances of success, and the fluctuation of markets, the annual produce of the fishery for 80 years has been £85,000 a year, and the average result of each voyage somewhere about £3500.

Peterhead has latterly taken the first place in the outfit for the Northern whale fishery, sending away annually about 29 ships. Peterhead received in 71 years 46,267 tuns of oil, the value of which and the whalebone was £2,323,380. The

average of the last ten years produced £62,338 per annum.

The following Table gives the Total produce of the Fishings and the approximate Value of the produce for ten years, 1849-58. The produce of the Seal Fishery has been noticed under that heading.

Place.		No. of Whales taken.	Tuns of Oil.	Cwts. of Bone.	Total Value.	
Peterhead Fraserburgh Banff - Aberdeen Dundee - Kirkaldy - Bo'ness - Hull -	:	:	238 11 197 270 160 32 199	12,161 1,101 87 1,921 2,710 1,511 470 8,705	2228 3732 1678 568 2799	£ 623,380 69,060 3,520 110,014 143,865 82,632 21,708
			1108	23,686	14,455	1,239,024

AMERICAN WHALE FISHERY.

In 1855 the number of vessels engaged in the whale fishery that entered the port of New Bedford was 104, and the value of the oil and bone imported was £1,250,000. In 1846 there were 678 American ships and barques, 35 brigs, and 22 schooners, in all 233,189 aggregate tonnage, employed in the whale fishery, chiefly in the South Seas and North Pacific. Going back seven years, we find that the number of vessels was nearly 670; on the 1st of January, 1861, it was only 514, showing a decrease, as compared with the previous year, of 55 vessels, with an aggregate of 18,803 tons. Three-fifths of these whaling ships are engaged in the North Pacific, which is the most profitable cruising ground. The remaining two-fifths are scattered over the North and South Atlantic, South Pacific and Indian Oceans. As late as 1800, 200 barrels of oil was considered a high average for each vessel for the season's catch, but then the cruising grounds were mostly in the North and South Atlantic. The average take for the North Pacific fleet, for several years past, has been about 1000 barrels for each ship.

A Polar whale yields, on an average, about 120 barrels of oil, each 36 gallons. In 1850 the imports into the United States were nearly 93,000 barrels of sperm oil, 201,000 barrels of whale oil, and about 3,000,000 lbs. of bone. The whole imports for 1859 were as follows:—Sperm, 9,141 tuns; whale, 19,041 tuns; bone, 1,923,850 lbs. From this it appears that there was an excess over the year 1858—in sperm of 946 tuns; whale, 819 tuns; and in bone, 383,250 lbs. The exports of oil and bone were:—Sperm, 5,221 tuns; whale, 818 tuns; and bone, 1,707,929 lbs. This shows that the export of sperm oil in 1859 largely exceeded that of 1858, while the export of whale oil was light. As regards prices, the average of whale oil was, in 1858, 2s 3d; and in 1859, 2s 0½d per gallon. During the same periods the prices in this country were respectively 2s 9d and 2s 5d per gallon. In America sperm oil, in 1858, was 5s 5d; and in 1859, 5s 8d per gallon, against 7s to 8s in this country. There is a steady and increasing demand for sperm oil, both in America and Europe, and it is calculated that the price will go on increasing.

The imports of sperm oil in 1860 amounted to 73,708 brls.; of whale oil, 140,005 brls.; and of whalebone, 1,337,650 lbs, against imports in 1859 of sperm oil, 91,400 brls.; whale oil, 190,421 brls.; and of whalebone, 1,923,850 lbs. The average prices in America during 1860 were for sperm oil 1412 cents; whale oil, 49½ cents per gallon; whalebone, northern, 80½ cents, and South Sea, 73½ cents per lb. The exports of oil and bone for the year 1860 were, sperm oil, 32,792 brls.; whale oil, 13,097 brls.; and of whalebone, 911,226 lbs., showing a falling off in the export of sperm from 1859, 19,415 brls., and in whalebone, 796,703 lbs., and an excess in whale oil of 4,828 brls.

The American whale trade of the Indian Ocean gives employment to about 3000 sailors, and that of Holland, France, and other countries to between 300 and 400. The usual size of a whaling vessel is from 500 to 600 tons, and the average complement of men to each about 44. The number of American vessels constantly engaged in the trade, within the limits of the Indian Ocean, is estimated at about 45; the general number of those belonging to other countries

at about 6. There are particular localities noted as good fishing-grounds—such as the vicinity of the coast of Ball, the coast of the Soloo Islands, the west coast of Borneo, Java Head, Exmouth Gulf, on the Northern Australian coast, and in fact the whole sea lying between the north coast of Australia and the islands of the Indian Archipelago, and the whole west coast of Australia, as far down as Cape Leuwin. The whales caught at Ball, Soloo, Borneo, and Java Head, are of the cachalot or sperm kind; those caught in the sea to the north of Australia, of various kinds—the cachalot, right whale and humpback; those caught on the west coast are also of various kinds.

WINE. There has been, for a series of years, a remarkable failure of the grape in the principal wine producing countries of the world. In Madeira the failure has been so general that the culture is almost abandoned. Many of the vines have died, and others have been cut down, and the vineyards have been

planted with other crops.

In Italy the grape failed for three successive years. Little Italian wine is exported, but in the scarcity of meat, which the poorer classes seldom taste, the light wine of the country is a necessary stimulant, and the failure acts with double force. The cultivators have no return for their labour, and the peasants are deprived of an article of diet which, in that country and in their circum-

stances, is necessary to their health.

In France the important wines are the Bordeaux (claret), Burgundy, and Champagne. Since 1848, when claret and Burgundy were fine, and Champagne second rate, nearly every year has been a failure as to quality or quantity, and some years of both. In 1849 the crops were fine in Burgundy, second rate at Bordeaux, and quite inferior in Champagne. In 1850 the quality was inferior; the best crop was in Burgundy. In 1851 the Bordeaux wines were of good quality, but the "oidium" began to reduce the quantity to a great extent. In Burgundy and Champagne there was no "oidium," but the wines were bad, green, and lacking body. The rains came inopportunely, when the grapes were formed, and a failure of the fruit ensued. In 1853 the crops were bad in all the districts; the best in Burgundy. In 1854 the Bordeaux and Burgundy wines were very fine; the Champagne not so good; but the quantity was so small that it is no exaggeration to say that there was not an average of one-twentieth of a crop in all the districts. In 1855 the grape promised well early in the season, but the crop was ruined by rain coming just at the time of the formation of the fruit. The crops in general were quite inferior in quality to those of the previous years, and were little greater in quantity. From that year dates the decrease of the disease in France and the improvement of the wine harvests. The wine lands of France are stated at 2,200,000 hectares, producing on an average 45,000,000 hectolitres. The average quantity of wine drunk in France under one form or other is about a hectolitre per head, that is, a hundred times more than in England. The exports of wine from France have been as follows:—

			Hectolitres.	i			Hectolitres.
1848	-	-	1,534,239	1853	-	-	1.956,184
1849	-	-	1,852,546	1854	-	-	1,315,161
1850	-	-	1,884,450	1855	-	-	1,194,901
1851	-	-	2,252,159	1856	-	-	1,249,845
1852	-	-	2.419.604	1857	-	-	1.098.102

The chief wine growing districts of France are Provence, Languedoc, Roussillon, Auvergne, Bourgogne, Saintonge, and Champagne, the rich valleys of the Gard, Herault, Garonne, Dordogne, the Loire and the Rhone, and the neighbouring departments as far as the Pyrenées, the Haute Pyrenées, and the Pyrenées Orientales.

Pyrenées Orientales.

The quantity of wine shipped from Lisbon declined from 27,448 pipes in 1853 to 11,752 in 1856. From Madeira also the exports of wine show a startling de-

crease, having dropped from 6690 pipes in 1852 to 1891 in 1856.

Notwithstanding some yearly fluctuations, since 1843, the average annual import of wine into the United Kingdom was very uniform, at a little over 8 million gallons until 1860, when it increased 50 per cent. The quantity taken for consumption has been

1845 - - 6,786,121 gallons | 1855 - - 6,296,439 gallons | 1850 - - 7,258,192 n

The consumption or wine had more steadily increased in 1859 than in former years, having reached 7,262,965 gallons, contributed by the following countries:—we add the figures for 1850 and 1860 by way of comparison.

			1850.	1859.	1860.
Spain	-		2,469,038	2,876,554	2,975,769
Portugal -	-		2,814,979	2,020,561	1,776,128
Cape of Good Hope	-		246,132	781.581	426,556
France -	•		340,748	695,913	1,125,599
Marsala	-		425,053	234,409	205.061
Madeira	-		70.363	29.566	25,912
Other countries -	-		70,909	634,463	820,104
Total gallons	-	-	6.437,222	7,263,046	7,858,193

The quantity consumed in this country in 1860, together with 2,275,307 gallons exported, gives a gross total of 9,633,499 gallons, against an importation of 12,483,362 gallons. The aggregate stock in the London Docks alone is usually equal to a year's consumption, allowing too for a fair expectation of increased consumption at the new duties.

From these statistics some peculiar facts are elicited, showing in what a small degree the consumption of wines has increased in this country in proportion to the increase of population and wealth, and that on an average only 14 persons in every 1000 drink their three dozen of wine annually, or what is

equivalent to a glass of wine per diem.

The fashion of wine-drinking has also altered; for Spanish sherry, which now is the most in use, was almost unknown in the early part of this century, when red wines were mostly drunk; whereas now two-thirds of what is used is white wines. The total exports of sherry wine from Cadiz to all the markets of the world were in 1855, 54,610 butts; in 1857, 50,707; in 1858, 28,729; in 1859, 45,916; and in 1860, 50,000. The consumption of this wine in the United Kingdom is on the average 26,000 butts annually. The reduction of the duty in 1860 to 3s per gallon increased the quantity about ten per cent. and with a further reduction in 1861 to 2s 5d, the consumption will no doubt increase.

further reduction in 1861 to 2s 5d, the consumption will no doubt increase.

The rates of duty now levied are 1s per gallon on all wines imported in casks, containing less than 18 per cent. of spirit; 1s 9d per gallon if less than 26 per cent. of spirit; 2s 5d if less than 40 per cent. of spirit; and 2s 1d if less than 45 per cent of spirit; and 2s 5d per gallon on all wines imported in bottles

45 per cent. of spirit; and 2s 5d per gallon on all wines imported in bottles.

The following are the results of experiments, upon a large scale, recently made, to ascertain the strength of various wines, and which may be relied on, viz.—

Ports......varying from 36 to 41 per cent., the average being 38 gallons of Spirit in every 100 gallons of wine.

						TAN Per	
Sherries	99	82 to 40	17.	99	36	97	**
Marsalas	91	29 to 34	11	99	32	. 10	71
Cape Wines	99	30 to 33	**	99	89	99	79
Hocks	99	18 to 21	11	**	17	99	19
French (Clarets)	12	13 to 18	22	"	15	**	79
Ditto(Burgundies)		21 to 24	**		22	-	

And these show that the stronger the wine the more it has hitherto been appreciated in this country; but it remains to be seen, by the introduction of lighter wines at a duty proportionate to the extent of spirit they contain (which is the only component part of wine that was ever liable to duty), whether great

changes will not speedily take place in the use of wines.

It is thought by some that at no very distant period the stronger wines most in use will, now that the public are no longer kept in the dark as to their alcoholic power, take the position that liqueurs do at present, and be drank only as stimulants and restoratives, and these days of moderation and advancement would seem to favour that opinion. Many instances are quoted of our ancestors taking their bottle or more of wine daily, when it was certainly stronger than now; if so, it was at a fearful expense to good constitutions, and those days have happily died away. In the selection of wines more study should be made of their use, whether for stimulating or digestive purposes, or for enjoyment.

In England (observe Messrs. Gilbey and Co., from whose trade report we quote) strange contradictions exist on this point, for the stronger wines are mostly taken at or immediately after dinner to assist digestion, as it is supposed,

whereas they are calculated to have just the reverse effect.

If the flavour of the stronger wines be preferred at meals, their digestive powers would be increased by dilution in water to three times the quantity, at the time of drinking; thus used, at the present rates of duty, the beverage would be cheaper than beer, of about the same strength, and far more refreshing and wholesome; the economical portion of the public will soon become alive to this

It will not be surprising to find in a few years that from this cause alone wines will in a great measure take the place of beer.

Some call beer our national beverage, and think it can never have a competitor, but so many changes come about in less than a generation, that it may not be held in such appreciation in years to come; who could have supposed that tea, which was first imported solely for the wealthy, and which can scarcely be said to be pleasant to the taste as the Chinese drink it, should have found its way into the poorest cottage? that tobacco, which requires an education by those who use it before it can be appreciated, should form such an important item in the Exchequer, or that bitter ale, which at first use is antagonistic to the palate, should be such an universal favourite?

It cannot be denied that beer, well made, and which has perfected all its fermentations, is wholesome and pleasant; but much of that now used is often not more than three weeks old, and has to perfect its ferimentation after having been consumed; nothing we take is more difficult of digestion, and it is absolute madness for persons of sedentary and inactive habits to persist in its use. It is said that our labouring population thrive on it; it is their labour they thrive on, and most of us would thrive on hard work where we sink comparatively by inactivity.

The introduction of light cheap wines at a low duty must therefore in time prove a boon, being both wholesome, refreshing, and an assistance to digestion.

It is a popular mistake to consider them colder than beer, and as erroneous to call them acid; nothing is more wholesome than the vinous tartar we taste in light wines. Most travellers state that the cheap light wines of the countries they visit invariably agree with their constitutions, and what is there in our

climate that can make the difference?

WOOL. Wool stands next to cotton in importance of the various raw materials employed in our home manufactures. The demand for wool is increasing very rapidly in all countries, and the production is at present insufficient to meet this demand. In England, notwithstanding our large imports and home production, economising expedients have been resorted to on an enlarged scale-The use of cotton in woollen and worsted fabrics has been vastly augmented, and the manufacture of rag wool (which consists of old worn out woollens, torn or ground up) has been developed into quite an important branch of business, under the name of shoddy or mungo. This is utilized to the extent of 45,000,000 lbs. annually (equal to about a third of our yearly importations of colonial and foreign wools) for the purpose of mixing with or adulterating wool in its manufacture.

And yet with all these enormous aids, the prices of wool when not checked by adverse extraneous influence, ever gravitate to an extreme range, such in fact as effectually to limit the consumption. The home production of wool is estimated at fully 200,000,000 lbs. and the imports of foreign and colonial have now reached the large amount of 148,000,000 lbs., although about 31,000,000 of this was re-exported in 1860.

All the British colonies have made immense strides in their production of wool, although the demand for food now keeps down the increase of sheep in Australia where the population has been rapidly increasing. In 1845 the Australian colonies sent to the United Kingdom alone 24,177,315 lbs.; in 1855, 49,142,306 lbs.; and in 1859, 59,165,939 lbs. The African colonies now produce about 25,000,000 lbs. of wool.

The wool of the alpaca imported from Peru, which is of various colours, white, grey, brown and black, has long been in demand at high prices for its silky texture and applicability for various purposes in articles of ladies' clothing. The imports fluctuate considerably, owing to revolutionary disturb-ances and difficulties of transport to the coast for shipment. It varies in price from 2s to 3s per lb. Including llama wool the imports have averaged in the last five years 2,600,000 lbs. per annum.

The sources of supply of wool to the United Kingdom have been as follows,

in bales:--

Countries.		1850.	1855.	1960.
Germany - Australia - Cape - Spanish - Portugal - Portugal - Peruvian and Alpaca East India and China Russian - Mediterranean Ports Buenos Ayres - Sundries - Goat's wool -		30,491 138,679 19,679 2,105 7,361 39,731 9,701 9,758 13,432 3,841 3,041 18,139	12,710 163,182 38,272 213 4,522 42,070 43,167 1,006 12,066 6,338 5,986 14,154	14,600 184,000 56,356 4.183 24,503 69,075 62,651 21,445 18,162 5,058 15,650 11,897
Total bales -	-]	291,161	343,686	487,580

The aggregate imports and exports of foreign and colonial wool, sheep, lamb and alpaca, have been as follows:-

		Imports.	Exports.
		lbs.	lbs.
1845	•	76,813,855	2,662,353
1850		74,326,778	14,388,674
1855	~	99, 300, 446	29,453,466
1860	_	148.396.577	80,661,867

WOOLLEN MANUFACTURE. The woollen manufacture engages upwards of £33,000,000 of British capital, the woollen and worsted trades forming more than a fourth part of our textile manufactures.

Relatively to the other great staple manufacture (cotton), the total value of the woollen manufactures stands at about one-half, the cotton manufactures being valued by competent Manchester authorities at about £60,000,000 sterling per annum. Regarding, however, the value of each manufacture in proportion as that value arises from the use of British labour and capital, the difference is not so great. In the cotton manufacture £20,000,000 are paid for the raw material, produced in a great measure in foreign countries, leaving £40,000,000 as the wages and profits of British industry applied to its fabrication. The woollen manufacture includes about £21,000,000 paid for British and Colonial raw material, and £12,000,000 paid for wages and profits of British manufacturing industry.

Home produce of wool in 1860 estimated at		12,000,000
Imports of foreign and colonial		9,000,000
of foreign woollen manufactures		1,000,000
Exports of British ,, ,,	:	16,000,000

The value of all kinds of woollens, worsteds, worsted hosiery, and woollen and worsted yarn exported from Great Britain in 1830, was £4,728,666; in 1840, £5,327,855; in 1850, £10,040,332; and in 1860, £16,007,257.

The progress of our manufacturing art in the woollen and worsted trades has (speaking generally) doubled the production of wool in Great Britain in propor-

tion to population.

The United Kingdom itself produces a larger amount of wool than any other country in the world; and yet it may truly be said that sheep are kept in this country in the world; and yet it may truly be said that sheep are kept in this

